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INSURANCE COLLISION REPORT

Passenger Cars, Vans, Pickups, and Utility Vehicles

Highway Loss Data Institute
R87-2

Highway Loss Data Institute
Insurance Collision Report

Passenger Cars, Vans, Pickups, and Utility Vehicles

1987 Models During Their First Year
1986 Models During Their First Two Years
1985 Models During Their First Three Years

HLDI R87-2

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SUMMARY

This Highway Loss Data Institute report describes variations in both the frequencies and the sizes of collision coverage claims for damage to 1985, 1986, and 1987 model year passenger cars, vans, pickups, and utility vehicles.

Passenger Cars

- Among 1987 vehicles, the GMC Safari Van* had the best overall collision coverage result (average loss payment per insured vehicle year) and the Chevrolet Corvette Convertible had the worst.
- Most of the models with the best results were large domestic vehicles; many of them were station wagons or passenger vans.
- Most of the models with the worst results were small imported vehicles; all of them were two-door or sports or specialty models.
- Collision coverage results continue to show substantial variations among vehicles grouped by size and body style. In many cases, the best and worst results for cars of the same size and body style vary by a factor of two or more.
- Claim frequencies, average loss payments per claim, and average loss payments per insured vehicle year generally decreased with increasing vehicle size in all body style groups.

Vans, Pickups, Utility Vehicles

- Among all vans, pickups, and utility vehicles, small utility vehicles and small pickups had the highest average loss payments per insured vehicle year; vans and large utility vehicles had the lowest.
- For the 1987 model year, the Toyota 4Runner pickup truck had the highest average loss payment per insured vehicle year and the Dodge B150 Cargo Van had the lowest.
- For the three model years, Toyota pickup trucks generally had collision claim frequencies and average claim amounts that were higher than those for all passenger cars combined.
- For pickup trucks and utility vehicles, results were clearly related to vehicle size with smaller vehicles having higher average loss payments per insured vehicle year than larger vehicles.
- For each of the three model years, small pickups and standard pickups had similar average loss payments per claim, but the small pickups had substantially higher claim frequencies.
- For each of the three model years, small, intermediate, and large utility vehicles generally had similar claim frequencies, but the average loss payments per claim decreased with increasing vehicle size.

* In recent years, a number of manufacturers produced vans that are predominantly aimed at the passenger vehicle market. These vehicles have attributes of both station wagons and vans. In this report the passenger carrying versions are grouped with station wagons and the cargo carrying versions are grouped with regular vans.

INTRODUCTION

The Highway Loss Data Institute (HLDI) — a nonprofit, public service organization — gathers, processes, and summarizes insurance data. Its research addresses the human and economic losses resulting from owning and operating motor vehicles, especially the ways such losses vary among different kinds of vehicles.

This report describes the collision coverage results of 1987 models during their first year of availability, 1986 models during their first two years, and 1985 models during their first three years. Results are presented for passenger cars, and for vans, pickup trucks, and utility vehicles.*

This report is based on collision coverage and loss data supplied by 13 insurers: Aetna, Allstate, Fireman's Fund, GEICO, Kemper, Liberty Mutual, Nationwide, Prudential, Safeco, Sentry, State Farm, Travelers, and USAA. Detailed explanations of data sources and methods of analysis are given in HLDI Report R87-1. A complete list of the vehicle classifications by make, series, body style, and size class appears in Appendix A, and definitions are given in Appendix B.

RESULTS AND DISCUSSION

The results in this report are presented in two sections. The first section summarizes variations in both the frequencies and the sizes of collision claims for damage to private passenger cars from three model years: 1987 models during their first year of availability, 1986 models during their first two years, and 1985 models during their first three years. The second section contains similar summaries for vans, pickups, and utility vehicles insured under noncommercial collision coverages.

The results were standardized to minimize differences that might be attributable to variations in the mix of deductible amounts and operator age groups among different vehicles. Both the frequency and average size of collision coverage losses vary with the deductible amount and the age group of the operators. Standardizing these two nonvehicle factors ensures that their mix is the same for each result. Therefore, to the extent that the distributions of age within each operator age group and amounts within each deductible group do not vary substantially for different vehicles, these effects cannot bias comparisons among the various results. Other nonvehicle factors have not necessarily been eliminated from the results presented in this report.

All of the results are shown in relative terms, with 100 representing the average for all passenger cars of each model year. Thus, for example, the relative average loss payment per insured vehicle year of 35 for the 1987 GMC Safari Van (Table 1) indicates a result that is 65 percent below the result for all 1987 model year passenger cars combined; the Chevrolet Corvette Convertible's result of 329 indicates that its average loss payment per insured vehicle year was more than triple the result for all 1987 passenger cars. The results for vans, pickup trucks, and utility vehicles are also shown relative to the all-passenger-cars results for each model year.

Passenger Cars

The results for passenger cars are presented by body style within each of the three vehicle size categories — small, midsize, and large. Appendix B contains a full description of the HLDI system for classification of passenger cars by body style and size. The results for the 1987 model year passenger cars are based on approximately 1.3 million insured vehicle years of exposure, those for the 1986 models on approximately 5.2 million insured vehicle years, and those for the 1985 models on about 8.8 million insured vehicle years. Results are not given for any individual vehicle series with less than 1,000 insured vehicle years of exposure. Generally, the greater the exposure associated with a result, the more confidence can be placed in it.

1987 Models During Their First Year

Table 1 summarizes the 1987 model year passenger cars with the lowest and highest relative average loss payments per insured vehicle year during their first year of availability. The average loss payment per insured vehicle year combines claim frequency and average loss payment per claim and thus accounts for not only how often collision claims are made but also the magnitude of such claims. The vehicles listed in Table 1 were taken from the 184 individual 1987 vehicle series that had more than 1,000 insured vehicle years of exposure. The standardized results for all 1987 vehicles combined were 10.3 for claim frequency, $1,881 for average loss payment per claim, and $194 for average loss payment per insured vehicle year.

Large domestic models again dominated the list of vehicles with the best overall collision coverage results. Over half of the models on this list were station wagons or passenger vans. The GMC Safari Van (35) had the lowest average loss payment per insured vehicle year; its companion** van — the Chevrolet Astro Van (45) — was the only other model with a result less than half the 1987 all-passenger-car result. The Dodge Caravan (53) and Plymouth Voyager (54), also companion vans, had comparable results. Both the four-door and station wagon versions of the Ford Crown Victoria were among the list of vehicles with the best results. The Cadillac Fleetwood d'Elegance (54) was the only specialty car on the list. The Honda Civic station wagon (58) was the only import, as well as the only small vehicle, listed among the vehicles with the best results.

*A separate, supplemental volume to this report, Appendices to R87-2, is available upon request. It contains detailed claim frequency and average loss payment per claim results for two classes of deductibles and for youthful and no youthful operators. The supplement also provides separate, detailed results by year of availability for 1985 and 1986 models.

**Vehicles from a single corporate entity, (e.g., General Motors) with essentially similar overall design but different model names.

Table 1 Relative Average Loss Payments Per Insured Vehicle Year for 1987 Model Year Passenger Vehicles With the Best and Worst Collision Coverage Results*

Best Results				Worst Results			
GMC Safari Van	P.V.	Large	35	Chevrolet Corvette Convertible	Sp.	Small	329
Chevrolet Astro Van	P.V.	Large	45	Chrysler Conquest	2Dr.	Small	329
Dodge Caravan	P.V.	Large	53	Porsche 924 Coupe	Sp.	Small	235
Ford Crown Victoria	4Dr.	Large	54	Chevrolet Corvette	Sp.	Small	224
Cadillac Fleetwood d'Elegance	Sp.	Large	54	Porsche 944 Coupe	Sp.	Small	205
Plymouth Voyager	P.V.	Large	54	Mazda RX-7	Sp.	Small	187
Dodge Diplomat	4Dr.	Large	57	Audi 5000	Sp.	Midsize	186
Chevrolet Celebrity	S.W.	Midsize	57	Mitsubishi Mirage	2Dr.	Small	183
Honda Civic	S.W.	Small	58	Pontiac Fiero	Sp.	Small	166
Ford Aerostar	P.V.	Large	59	Volkswagen GTI	2Dr.	Small	165
Chevrolet Caprice	4Dr.	Large	60	Nissan 300ZX	Sp.	Small	163
Mercury Grand Marquis	4Dr.	Large	60	Toyota Supra	Sp.	Midsize	163
Ford Crown Victoria	S.W.	Large	62	Ford EXP	Sp.	Small	163
Buick Century	S.W.	Midsize	65	Toyota Corolla	2Dr.	Small	163
				Nissan 200SX	2Dr.	Small	163

P.V. = Passenger Van; S.W. = Station Wagon; Sp. = Sports or Specialty
*100 represents the average for all 1987 passenger vehicles ($194).

As was the case with last year's HLDI collision report, imported models dominated the list of vehicles with the worst overall collision coverage results. All of the listed vehicles were two-door or sports or specialty models, and all but two (the Audi 5000 and Toyota Supra) were small vehicles. The Chevrolet Corvette Convertible (329) and the imported Chrysler Conquest (329) headed this list with values more than triple the 1987 all-passenger-car result. The Porsche 924 Coupe (235), Chevrolet Corvette (224), and Porsche 944 Coupe (205) all had results more than twice the 1987 model year average.

Detailed collision coverage results for all 1987 model year vehicles with at least 1,000 insured vehicle years of exposure are given in Table 4 (page 6). The values displayed are total exposure, measured in insured vehicle years, and relative values for three loss categories — claim frequency per 100 insured vehicle years, average loss payment per claim, and average loss payment per insured vehicle year. The value 100 corresponds to the average result for all passenger cars in each loss category. The individual series are listed in ascending sequence of the relative average loss payment per insured vehicle year within each size and body style subgroup.

The Chrysler Conquest (188) had the highest relative claim frequency and the Porsche 911 Coupe (51) had the lowest. The Chevrolet Corvette Convertible (360) had the highest average loss payment per claim (approximately $6,800). The regular Chevrolet Corvette (306) also had an average loss payment per claim more than triple the 1987 all-car result. The GMC Safari Van (53) and Chevrolet Astro Van (55) had the two lowest average loss payments per claim (approximately $1,000).

As has been the case in previous years, the collision coverage results for 1987 models continue to show substantial variations among vehicles grouped by size and body style. In many cases, the best and worst results for cars of the same size and body style vary by a factor of two or more.

Table 4 also shows that claim frequencies, average loss payments per claim, and average loss payments per insured vehicle year generally decreased with increasing vehicle size in each body style group. For example, two-door vehicles as a group had the following relative claim frequencies for the three size classes: small (124), midsize (102), and large (84).

1986 Models During Their First Two Years

Table 2 summarizes the best and worst collision coverage results for 1986 model year passenger cars during their first two years of availability. The vehicles listed in Table 2 were taken from the 256 individual 1986 vehicle series that had more than 1,000 insured vehicle years of exposure. The standardized results for all 1986 vehicles combined for both years of availability were 10.4 for claim frequency, $1,788 for average loss payment per claim, and $185 for average loss payment per insured vehicle year.

All of the 1986 vehicles with the best results were domestic models and most are classified as large vehicles. Over half of the vehicles with the best results were station wagons or passenger vans. The two-door Ford Crown Victoria (44) and Pontiac Parisienne station wagon (44) led the list of vehicles with the best results. They were the only vehicles with results less than half the 1986 all-passenger-car result. Two-door and four-door versions of the Ford Crown Victoria and Mercury Grand Marquis, as well as four-door and station wagon versions of the Chevrolet Caprice and Pontiac Parisienne,

Table 2 Relative Average Loss Payments Per Insured Vehicle Year for 1986 Model Year Passenger Vehicles With the Best and Worst Collision Coverage Results*

Best Results				Worst Results			
Ford Crown Victoria	2Dr.	Large	44	Audi 5000 Quattro 4Dr.	Sp.	Midsize	284
Pontiac Parisienne	S.W.	Large	44	Porsche 944 Coupe	Sp.	Small	267
Mercury Grand Marquis	2Dr.	Large	50	Chevrolet Corvette Convertible	Sp.	Small	259
Ford LTD	S.W.	Midsize	51				
American Eagle	S.W.	Midsize	51	Plymouth Conquest	2Dr.	Small	252
Pontiac Parisienne	4Dr.	Large	53	Mitsubishi Starion	2Dr.	Small	247
Plymouth Voyager	P.V.	Large	54	Dodge Conquest	2Dr.	Small	242
Chevrolet Astro Van	P.V.	Large	55	Porsche 911 Coupe	Sp.	Small	235
Dodge Caravan	P.V.	Large	55	Volkswagen Scirocco	2Dr.	Small	221
Mercury Grand Marquis	4Dr.	Large	57	Mitsubishi Cordia	2Dr.	Small	218
Ford Crown Victoria	4Dr.	Large	57	Chevrolet Corvette	Sp.	Small	213
Pontiac 6000	S.W.	Midsize	61	Audi GT Coupe	2Dr.	Midsize	212
Oldsmobile Custom Cruiser	S.W.	Large	61	BMW 735i	Sp.	Large	210
				BMW 325e 2Dr.	Sp.	Midsize	205
Chevrolet Caprice	4Dr.	Large	61	BMW 325e 4Dr.	Sp.	Midsize	197
Chevrolet Caprice	S.W.	Large	62	Subaru XT Coupe 4WD	2Dr.	Small	197

P.V. = Passenger Van; S.W. = Station Wagon; Sp. = Sports or Specialty
*100 represents the average for all 1986 passenger vehicles ($185).

were listed among the vehicles having the best results. Both of the Chrysler passenger vans — the Dodge Caravan and Plymouth Voyager — were also listed among the vehicles with the best results for 1986 passenger cars. Three midsize station wagons also made this list; the Ford LTD (51), American Eagle (51), and Pontiac 6000 (61).

As was the case with 1987 model results, many of the 1986 vehicles with the worst overall collision losses were imported models. All of the cars with the worst results were two-door or sports or specialty models and two-thirds of them are classified as small cars. The four-door Audi 5000 Quattro (284) had the highest average loss payment per insured vehicle year. The Porsche 944 Coupe (267), Chevrolet Corvette Convertible (259), and Plymouth Conquest (252) also had overall collision losses that were more than two and one-half times the 1986 all-passenger-car result. The BMW 735i (210) was the only large vehicle among those with the highest results for 1986 passenger cars.

Detailed collision coverage results for all 1986 models with at least 1,000 insured vehicle years of exposure are given in Table 5 (page 12). The results displayed are the combined results for the first two years of the 1986 models and are presented by vehicle size group and body style subgroup.

The Mitsubishi Cordia (181) and Mitsubishi Starion (178) had the two highest claim frequencies among the 1986 passenger cars listed in Table 5. The American Eagle station wagon (56) and two-door Ford Crown Victoria (56) had the two lowest claim frequencies. The Chevrolet Corvette Convertible (263) and Porsche 911 Coupe (263) had the highest average loss payments per claim (approximately $4,200). The Volkswagen Vanagon's (57) average loss payment per claim (approximately $1,000) was the lowest among the 1986 passenger cars.

The results for 1986 models in Table 5 are very similar to those for the 1987 models in Table 4. For both model years, vehicles with the best results are often separated from those with the worst results within the same body style and car size group by a factor of two or more, and collision loss results tend to decrease with increasing vehicle size for each of the body style groups.

1985 Models During Their First Three Years

Table 3 summarizes the 1985 model year passenger cars with the best and worst collision coverage results during their first three years of availability. The vehicles listed were taken from the 249 individual 1985 vehicle series that had more than 1,000 insured vehicle years of exposure. The standardized results for all 1985 vehicles combined for all three years of availability were 10.1 for claim frequency, $1,687 for average loss payment per claim, and $170 for average loss payment per insured vehicle year

All of the 1985 vehicles with the best average loss payments per insured vehicle year were domestic models and most were large models. The four-door Mercury Grand Marquis (55) and GMC Safari Van (55) had the lowest results among the 1985 passenger cars. Two-door and four-door versions of the Oldsmobile Delta 88, as well as four-door and station wagon versions of the Chevrolet Caprice and Pontiac Parisienne, were listed among the 1985 model vehicles having the best results. The Chrysler vans — the Dodge Caravan and Plymouth Voyager — were also listed among the models with the lowest results for 1985 passenger vehicles.

Table 3 Relative Average Loss Payments Per Insured Vehicle Year for 1985 Model Year Passenger Vehicles With the Best and Worst Collision Coverage Results*

Best Results				Worst Results			
Mercury Grand Marquis	4Dr.	Large	55	Dodge Conquest	2Dr.	Small	260
GMC Safari Van	P.V.	Large	55	Jaguar XJ-S	Sp.	Midsize	255
Ford Crown Victoria	4Dr.	Large	56	Mitsubishi Starion	2Dr.	Small	246
Oldsmobile Delta 88	4Dr.	Large	58	Audi GT Coupe	2Dr.	Midsize	239
Chevrolet Impala	4Dr.	Large	59	Porsche 944 Coupe	Sp.	Small	229
Chevrolet Astro Van	P.V.	Large	59	Volkswagen Scirocco	2Dr.	Small	224
American Eagle	S.W.	Midsize	60	BMW 635CSi	Sp.	Midsize	209
Buick LeSabre	4Dr.	Large	60	Plymouth Conquest	2Dr.	Small	198
Dodge Caravan	P.V.	Large	60	Nissan 300ZX	Sp.	Small	198
Plymouth Voyager	P.V.	Large	61	Renault Fuego	2Dr.	Small	198
Chevrolet Caprice	4Dr.	Large	62	Audi 4000 Quattro	Sp.	Small	193
Pontiac Parisienne	S.W.	Large	62	BMW 318i/325e 2Dr.	Sp.	Midsize	191
Pontiac Parisienne	4Dr.	Large	62	Merkur XR4Ti	Sp.	Midsize	187
Oldsmobile Delta 88	2Dr.	Large	63	Volkswagen GTI	2Dr.	Small	185
Pontiac Bonneville	4Dr.	Midsize	63	Porsche 928 Coupe	Sp.	Small	184
Chevrolet Caprice	S.W.	Large	63				

P.V. = Passenger Van; S.W. = Station Wagon; Sp. = Sports or Specialty
*100 represents the average for all 1985 passenger vehicles ($170).

All but one of the 1985 vehicles listed as having the worst average loss payments per insured vehicle year were imported models. (The Dodge Conquest and Plymouth Conquest are imported models manufactured jointly by Chrysler Corporation and Mitsubishi, and the Volkswagen GTI is manufactured in the United States.) All of the cars with the worst results were two-door or sports or specialty models and two-thirds of the vehicles are classified as small cars. The Dodge Conquest (260) had the highest average loss payment per insured vehicle year. The Jaguar XJ-S (255) also had collision losses more than two and one-half times the 1985 all-passenger-car result.

Detailed collision coverage results for all 1985 models with at least 1,000 insured vehicle years of exposure are given in Table 6 (page 20). The results displayed are the combined results of the first three years for the 1985 models.

Among the 1985 passenger cars, the Volkswagen GTI (180) had the highest relative claim frequency and the Mercedes 500SEC (50) had the lowest. For average loss payment per claim, the BMW 635CSi (240) had the highest value (more than $4,000) and the Volkswagen Vanagon (60) had the lowest (approximately $1,000).

(Continued on page 28)

TABLE 4
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
All	All	1303715	100 =	100 =	100 =
			10.3	$ 1,881	$ 194
		SMALL CARS			
TWO-DOOR MODELS		210541	124	103	127
Chevrolet	Chevette	4630	98	88	86
Mazda	323	2549	96	93	89
Honda	Civic	8484	105	88	92
Toyota	Tercel	9076	110	86	94
Chevrolet	Spectrum	1166	114	89	102
Plymouth	Colt	2453	104	99	103
Plymouth	Sundance	4443	117	90	106
Yugo	Yugo	4503	119	90	107
Chevrolet	Sprint	3607	118	94	111
Honda	Prelude	11096	116	97	113
Ford	Escort	19200	119	96	114
Hyundai	Excel	7938	130	89	116
Mercury	Lynx	2046	121	101	122
Dodge	Shadow	4458	135	93	124
Acura	Integra	4678	114	110	126
Plymouth	Turismo	9737	131	98	128
Nissan	Sentra	47190	122	107	131
Dodge	Charger	10621	131	103	134
Dodge	Colt	3099	115	118	136
Dodge	Daytona	1804	126	109	137
Toyota	Celica	12047	138	104	143
Volkswagen	Golf	1826	127	114	144
Nissan	Pulsar	6132	150	97	146
Saab	900	2449	129	123	158
Mazda	626	3350	145	109	159
Nissan	200SX	4758	129	127	163
Toyota	Corolla	2791	123	132	163
Volkswagen	GTI	1399	158	104	165
Mitsubishi	Mirage	1029	158	115	183
Chrysler	Conquest	1651	188	175	329

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
FOUR-DOOR MODELS		**213558**	**106**	**96**	**102**
Dodge	Omni	25935	94	84	80
Dodge	Shadow	4444	108	75	81
Chevrolet	Nova	10620	98	85	83
Chevrolet	Chevette	2248	102	84	85
Subaru	DL/GL	2022	100	86	86
Plymouth	Horizon	33268	97	90	88
Toyota	Corolla	13153	96	95	91
Ford	Escort	8284	96	98	94
Plymouth	Sundance	5315	103	92	95
Volkswagen	Golf	2725	107	96	102
Honda	Civic	17479	108	98	106
Chevrolet	Sprint	2038	108	99	107
Mazda	323	7128	107	102	109
Plymouth	Colt	2737	111	102	113
Nissan	Sentra	21461	114	101	115
Chevrolet	Spectrum	3045	117	100	117
Dodge	Colt	3322	115	103	118
Saab	900	1607	106	113	120
Hyundai	Excel	18856	129	95	122
Mazda	626	9353	118	104	123
Mitsubishi	Mirage	1083	137	100	137
Acura	Integra	2795	110	128	141
Volkswagen	Jetta	7852	132	113	148
STATION WAGONS/PASSENGER VANS		**29386**	**86**	**93**	**80**
Honda	Civic	1934	69	85	58
Nissan	Van	1171	96	68	66
Toyota	Tercel	1097	79	83	66
Ford	Escort	5711	79	91	72
Subaru	DL/GL 4WD	5199	79	93	73
Mazda	323	1399	80	96	77
Subaru	DL/GL	1749	76	105	80
Toyota	Van	1737	114	71	81
Nissan	Sentra	4700	95	103	98

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
SPORTS & SPECIALTY		**43532**	**126**	**134**	**169**
Mercedes	560SL Conv.	1437	60	139	83
Porsche	911 Coupe	1051	51	195	99
Volkswagen	Cabriolet	1626	108	108	117
Honda	Civic CRX	9124	129	109	141
Toyota	MR2	2234	138	109	150
Ford	EXP	3410	131	124	163
Nissan	300ZX	2082	102	160	163
Pontiac	Fiero	5498	157	106	166
Mazda	RX-7	8053	140	133	187
Porsche	944 Coupe	1768	116	177	205
Chevrolet	Corvette	2702	73	306	224
Porsche	924 Coupe	1183	152	155	235
Chevrolet	Corvette Conv.	1019	91	360	329
		MIDSIZE CARS			
TWO-DOOR MODELS		**127773**	**102**	**100**	**102**
Buick	Somerset	4782	93	80	74
Oldsmobile	Cutlass	9216	82	103	84
Oldsmobile	Cutlass Ciera	2564	76	117	89
Pontiac	Grand Am	18879	91	103	94
Chevrolet	Celebrity	1836	80	118	94
Buick	Regal	5262	94	100	94
Pontiac	Grand Prix	2140	89	108	96
Ford	Thunderbird	9373	84	115	97
Oldsmobile	Calais	8434	108	92	99
Buick	Skyhawk	2437	114	88	100
Mercury	Cougar	8157	96	109	104
Honda	Accord	8913	111	95	106
Chevrolet	Monte Carlo	7621	95	113	106
Ford	Tempo	8505	111	98	108
Chrysler	LeBaron	2680	109	101	110
Mercury	Topaz	1636	123	91	112
Chevrolet	Cavalier	15945	134	93	124
Pontiac	Sunbird	6071	139	100	140

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
FOUR-DOOR MODELS		**302656**	**92**	**98**	**90**
Plymouth	Caravelle	2559	84	78	66
Chrysler	LeBaron	5908	77	92	71
Toyota	Camry	20152	80	91	72
Mercury	Topaz	4488	87	84	73
Oldsmobile	Cutlass	3806	84	88	74
Buick	Skyhawk	1435	82	92	75
Oldsmobile	Cutlass Ciera	19561	74	102	75
Chevrolet	Celebrity	18585	79	96	76
Dodge	600	2206	84	92	77
Chrysler	New Yorker	6272	81	96	77
Buick	Century	11959	83	94	78
Plymouth	Reliant	6991	80	101	81
Volvo	240	4724	86	94	81
Ford	Tempo	15954	98	85	83
Oldsmobile	Calais	4793	98	86	84
Pontiac	6000	7623	86	99	85
Dodge	Aries	5459	83	104	86
Chrysler	LeBaron GTS	3471	92	95	87
Ford	Taurus	17102	94	93	88
Pontiac	Grand Am	7216	90	101	91
Chevrolet	Cavalier	10884	118	80	95
Buick	Skylark	3090	104	93	97
Pontiac	Sunbird	2287	92	106	98
Dodge	Lancer	1720	91	107	98
Honda	Accord	42803	100	98	99
Mercury	Sable	6174	103	97	100
Toyota	Cressida	3684	97	105	102
Nissan	Stanza	14352	111	97	107
Nissan	Maxima	41153	100	114	114
Cadillac	Cimarron	1559	91	145	132
Mitsubishi	Galant	1900	112	120	133

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
STATION WAGONS/PASSENGER VANS		**46671**	**79**	**92**	**73**
Chevrolet	Celebrity	4956	71	81	57
Buick	Century	1464	85	76	65
Volvo	240	2468	74	90	66
Toyota	Camry	4054	68	99	68
Dodge	Aries	2403	73	95	69
Ford	Taurus	8499	79	89	70
Dodge	Colt Vista 4WD	1034	59	118	70
Plymouth	Reliant	2766	76	93	70
Oldsmobile	Cutlass Ciera	2417	80	89	71
Mercury	Sable	2594	99	79	78
Dodge	Colt Vista	1864	84	94	79
Chevrolet	Cavalier	4159	95	94	89
Nissan	Maxima	2898	82	112	91
Plymouth	Colt Vista	1539	97	110	107
SPORTS & SPECIALTY		**84850**	**119**	**119**	**141**
Volvo	740/760 SW	2027	96	97	93
BMW	500 Series	2378	83	118	98
Acura	Legend 4D	4115	98	105	103
Volvo	740/760	5296	94	114	107
Lincoln	Continental	2103	101	108	109
Lincoln	Mark VII	2803	87	138	119
Saab	9000	1380	107	126	134
Ford	Mustang Conv.	1553	126	107	135
Mercedes	190D/E	2658	123	111	136
Ford	Mustang	15106	119	124	147
BMW	325 4D	2512	103	143	148
Cadillac	Eldorado	1379	77	199	152
Chevrolet	Camaro	14478	139	115	159
BMW	325 2D	3414	108	148	160
Pontiac	Firebird	10084	153	104	160
Toyota	Supra	5241	111	147	163
Audi	5000	2047	97	192	186

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS			
TWO-DOOR MODELS		**5574**	**84**	**95**	**79**
Oldsmobile	Delta 88	1160	100	82	82
Buick	LeSabre	1425	104	79	82
FOUR-DOOR MODELS		**115611**	**75**	**92**	**69**
Ford	Crown Victoria	9713	59	91	54
Dodge	Diplomat	4035	62	92	57
Chevrolet	Caprice	13251	72	84	60
Mercury	Grand Marquis	14419	69	88	60
Chrysler	New Yorker 5th Ave	17087	66	103	68
Oldsmobile	Ninety-Eight	8163	80	89	71
Buick	LeSabre	14112	83	87	72
Buick	Electra	6430	77	94	72
Plymouth	Gran Fury	1924	79	102	81
Pontiac	Bonneville	9813	83	100	83
Oldsmobile	Delta 88	16664	91	92	83
STATION WAGONS/PASSENGER VANS		**80415**	**77**	**71**	**54**
GMC	Safari Van	2645	66	53	35
Chevrolet	Astro Van	12258	82	55	45
Dodge	Caravan	17839	75	70	53
Plymouth	Voyager	18111	79	68	54
Ford	Aerostar	20175	72	82	59
Ford	Crown Victoria	1520	73	84	62
Chevrolet	Caprice	3202	87	79	68
Oldsmobile	Custom Cruiser	1644	94	78	73
SPORTS & SPECIALTY		**43148**	**82**	**109**	**89**
Cadillac	Fleetwood d'Elegance	1812	79	68	54
Cadillac	DeVille 2D	3761	76	99	75
Cadillac	DeVille 4D	10141	83	98	81
Cadillac	Brougham	6294	81	102	83
Lincoln	Town Car	9879	84	101	85
Mercedes	260/300 Series	4892	96	123	118
Jaguar	XJ6	2414	73	170	124
Mercedes	420/560SEL/300SDL	3281	68	215	147

(See notes on page 27.)

TABLE 5
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
All	All	5215944	100 = 10.4	100 = $ 1,788	100 = $ 185
		SMALL CARS			
TWO-DOOR MODELS		688713	122	102	124
Toyota	Tercel	17107	95	84	80
Pontiac	1000	5163	105	90	94
Mercury	Lynx	16978	110	87	96
Honda	Civic	36935	105	93	97
Yugo	Yugo	12290	113	86	97
Ford	Escort	98776	108	90	97
Chevrolet	Chevette	14516	112	90	100
Chevrolet	Sprint	18447	113	91	103
Mazda	323	11958	106	101	107
Isuzu	I-Mark	2787	112	98	110
Volkswagen	Golf	8687	113	97	110
Subaru	Hatchback	6804	111	100	111
Dodge	Colt	16942	115	97	112
Nissan	Sentra	46550	122	93	113
Renault	Encore	4550	118	97	115
Chevrolet	Spectrum	13107	123	95	117
Subaru	GL 4WD	1922	107	109	117
Subaru	Hatchback 4WD	2179	112	107	119
Hyundai	Excel	5975	130	92	119
Plymouth	Colt	13378	122	98	120
Renault	Alliance	10083	123	98	121
Volkswagen	Jetta	3084	130	93	122
Honda	Prelude	39300	117	111	130
Acura	Integra	4265	121	111	134
Nissan	Pulsar	32777	124	111	137
Subaru	DL/GL	3002	136	101	137
Toyota	Celica	56288	139	101	140
Dodge	Daytona	20441	133	107	142
Mazda	626	13244	137	104	143

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
Chrysler	Laser	16058	136	106	144
Toyota	Corolla	19347	130	113	147
Plymouth	Turismo	17401	138	107	148
Mitsubishi	Mirage	7068	140	108	151
Saab	900	11958	112	136	152
Dodge	Charger	17491	137	114	156
Nissan	200SX	24509	137	115	158
Isuzu	Impulse	4614	152	108	164
Subaru	XT Coupe	7915	170	104	176
Volkswagen	GTI	9399	166	116	193
Subaru	XT Coupe 4WD	3175	167	118	197
Mitsubishi	Cordia	3027	181	120	218
Volkswagen	Scirocco	4405	152	145	221
Dodge	Conquest	1273	173	140	242
Mitsubishi	Starion	2226	178	139	247
Plymouth	Conquest	1278	167	151	252
FOUR-DOOR MODELS		**640051**	**106**	**95**	**101**
Mercury	Lynx	8352	91	84	77
Toyota	Tercel	5853	92	85	78
Ford	Escort	45586	92	86	79
Chevrolet	Nova	77829	92	92	85
Plymouth	Horizon	25570	102	84	86
Toyota	Corolla	64837	95	95	90
Dodge	Omni	22177	104	89	93
Chevrolet	Chevette	12555	105	90	94
Honda	Civic	41695	101	94	96
Chevrolet	Spectrum	28969	115	87	100
Volkswagen	Golf	15833	109	93	101
Renault	Alliance	14255	109	96	104
Chevrolet	Sprint	15239	118	89	105
Nissan	Sentra	24728	118	93	109
Renault	Encore	2510	105	104	110
Isuzu	I-Mark	7180	109	101	110
Mazda	626	39440	108	103	111
Saab	900	7419	98	114	112
Nissan	Stanza	8436	105	107	112
Subaru	DL/GL	20872	118	96	113

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
Pontiac	1000	3290	123	95	117
Mazda	323	22752	107	110	118
Hyundai	Excel	38454	128	93	119
Volkswagen	Jetta	44359	123	100	122
Dodge	Colt	13709	114	109	124
Subaru	GL 4WD	6350	127	99	125
Plymouth	Colt	11089	118	107	126
Acura	Integra	4480	124	118	146
Mitsubishi	Tredia	6234	139	123	171
STATION WAGONS/PASSENGER VANS		**162459**	**88**	**92**	**81**
Honda	Civic 4WD	3655	66	97	64
Ford	Escort	36098	78	82	64
Mercury	Lynx	4652	76	87	66
Volkswagen	Vanagon	3041	123	57	70
Toyota	Tercel	8034	86	85	74
Toyota	Tercel 4WD	7820	72	104	75
Nissan	Stanza 4WD	3200	73	103	75
Honda	Civic	10032	76	104	79
Toyota	Van	12517	108	76	82
Nissan	Stanza	23839	75	114	85
Nissan	Sentra	8016	105	82	86
Subaru	DL/GL	14387	101	96	97
Subaru	DL/GL 4WD	25590	107	93	100
SPORTS & SPECIALTY		**208942**	**129**	**129**	**167**
Volkswagen	Cabriolet	5663	110	114	126
Honda	Civic CRX	34750	123	107	132
Mercedes	560SL Conv.	4386	61	246	150
Pontiac	Fiero	40027	147	104	153
Ford	EXP	12791	136	113	153
Toyota	MR2	16913	151	113	171
Nissan	300ZX	22262	119	146	173
Audi	4000 Quattro	2115	118	148	174
Nissan	300ZX 2+2	7469	115	153	176
Subaru	XT Coupe DL	1375	176	102	179
Mazda	RX-7	27152	141	130	183

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
Porsche	928 Coupe	1031	117	161	188
Alfa Romeo	Spider Conv.	2215	128	151	193
Chevrolet	Corvette	14103	89	241	213
Porsche	911 Coupe	3449	89	263	235
Chevrolet	Corvette Conv.	2338	98	263	259
Porsche	944 Coupe	9474	135	198	267
		MIDSIZE CARS			
TWO-DOOR MODELS		**733065**	**104**	**98**	**102**
Buick	Century	6035	86	87	75
Dodge	600	5116	81	94	75
Chevrolet	Celebrity	13288	83	94	78
Plymouth	Reliant	7406	95	85	81
Oldsmobile	Cutlass	71069	82	99	81
Oldsmobile	Cutlass Ciera	16698	86	98	84
Buick	Regal	40746	88	98	86
Dodge	Aries	6364	92	94	86
Chrysler	LeBaron	12481	89	98	87
Oldsmobile	Firenza	7936	104	87	91
Pontiac	6000	3855	97	94	91
Pontiac	Grand Prix	18333	98	97	95
Ford	Tempo	28973	108	90	97
Buick	Somerset	34644	106	93	99
Mercury	Topaz	5320	113	88	100
Buick	Skyhawk	24560	110	93	102
Oldsmobile	Calais	41469	111	93	104
Pontiac	Grand Am	64089	104	102	106
Honda	Accord	33293	108	100	107
Chevrolet	Monte Carlo	49310	102	109	111
Mercury	Cougar	60066	106	105	111
Ford	Thunderbird	71925	103	108	111
Chevrolet	Cavalier	80725	127	93	118
Pontiac	Sunbird	27677	127	96	123
Audi	GT Coupe	1687	135	157	212

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
FOUR-DOOR MODELS		**1303515**	**91**	**94**	**86**
Oldsmobile	Cutlass	25003	71	92	65
Plymouth	Caravelle	11580	79	85	66
Ford	LTD	21086	75	89	67
Chevrolet	Celebrity	102178	81	88	71
Dodge	600	10416	85	84	72
Mercury	Marquis	10751	77	94	73
Toyota	Camry	88831	85	87	74
Pontiac	Bonneville	17860	77	96	74
Buick	Skyhawk	10379	92	81	74
Dodge	Aries	18480	78	95	75
Oldsmobile	Cutlass Ciera	119819	76	99	75
Chrysler	LeBaron	19646	82	93	76
Ford	Tempo	67019	97	82	80
Ford	Taurus	57358	92	88	81
Mercury	Sable	23077	93	87	81
Plymouth	Reliant	21014	83	98	81
Oldsmobile	Firenza	7116	95	86	81
Buick	Century	96932	85	96	82
Chrysler	New Yorker	23967	85	98	83
Mercury	Topaz	15062	96	87	84
Pontiac	6000	65376	93	95	89
Buick	Skylark	22220	100	90	90
Chevrolet	Cavalier	63391	109	84	91
Pontiac	Grand Am	38114	95	97	92
Volvo	240	19611	86	108	93
Pontiac	Sunbird	16805	106	89	95
Chrysler	LeBaron GTS	32318	100	96	96
Dodge	Lancer	21350	96	100	96
Cadillac	Cimarron	11444	94	103	97
Oldsmobile	Calais	25527	109	91	99
Honda	Accord	130262	103	97	99
Toyota	Cressida	21954	98	103	101
Nissan	Maxima	41851	106	121	129
Mitsubishi	Galant	9841	118	111	131
Peugeot	505	3817	118	128	151
Volkswagen	Quantum	3847	138	111	154
Audi	4000	7631	125	128	160

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
STATION WAGONS/PASSENGER VANS		**193728**	**81**	**91**	**74**
Ford	LTD	5164	69	74	51
American	Eagle	2866	56	92	51
Pontiac	6000	6986	79	77	61
Chevrolet	Celebrity	31392	74	86	64
Buick	Skyhawk	2481	83	83	69
Mercury	Sable	7991	85	82	70
Chrysler	LeBaron	2733	70	102	71
Plymouth	Reliant	10876	73	98	72
Ford	Taurus	20890	83	86	72
Oldsmobile	Cutlass Ciera	14217	82	89	74
Mercury	Marquis	1238	69	108	74
Plymouth	Colt Vista 4WD	2984	69	111	77
Buick	Century	10785	78	99	77
Dodge	Aries	9574	77	101	78
Volvo	240	12688	79	100	79
Pontiac	Sunbird	2247	87	91	80
Chevrolet	Cavalier	24066	96	85	82
Dodge	Colt Vista	6821	89	95	84
Oldsmobile	Firenza	1983	96	89	85
Dodge	Colt Vista 4WD	3404	78	116	90
Nissan	Maxima	3695	88	104	91
Plymouth	Colt Vista	5968	91	105	96
Toyota	Cressida	2094	88	110	97
SPORTS & SPECIALTY		**420685**	**121**	**121**	**147**
Lincoln	Continental	7259	80	116	92
Chrysler	LeBaron Conv.	8482	91	103	94
Oldsmobile	Toronado	4748	101	94	95
Lincoln	Mark VII	8094	81	118	96
Dodge	600 Conv.	5915	100	98	98
Acura	Legend	7983	92	110	101
Volvo	740/760 SW	7630	94	109	102
Cadillac	Seville	5489	95	107	102
Cadillac	Eldorado	7239	94	110	103
Volvo	740/760	19623	99	112	111
Chevrolet	Cavalier Conv.	2005	124	92	114

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
Buick	Riviera	5785	115	101	117
Mercury	Capri	6138	105	120	126
Pontiac	Sunbird Conv.	1019	126	102	129
Ford	Mustang Conv.	9723	104	127	133
Ford	Mustang	86548	119	116	139
Toyota	Supra	9489	114	130	148
Audi	5000	21378	109	138	151
Saab	9000	4172	114	136	155
Merkur	XR4Ti	3585	108	148	160
Chevrolet	Camaro	85423	142	114	162
Jaguar	XJ-S	1781	87	188	163
Mercedes	190D/E	9768	114	145	166
BMW	500 Series	9254	94	179	169
Pontiac	Firebird	50119	149	116	174
Toyota	Celica Supra	3354	116	152	176
BMW	325e 4D	10327	115	172	197
BMW	325e 2D	15313	122	168	205
Audi	5000 Quattro 4D	1135	121	235	284
		LARGE CARS			
TWO-DOOR MODELS		**37863**	**84**	**90**	**76**
Ford	Crown Victoria	3021	56	78	44
Mercury	Grand Marquis	2585	61	83	50
Chevrolet	Caprice	4470	78	82	64
Buick	Electra	2111	88	86	76
Buick	LeSabre	8741	90	87	79
Oldsmobile	Ninety-Eight	2788	87	96	83
Oldsmobile	Delta 88	14147	92	95	87
FOUR-DOOR MODELS		**399604**	**76**	**90**	**68**
Pontiac	Parisienne	26900	65	82	53
Mercury	Grand Marquis	39015	66	86	57
Ford	Crown Victoria	28834	64	89	57
Chevrolet	Caprice	61087	79	78	61
Plymouth	Gran Fury	3103	68	98	66

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS (CONTD)			
Oldsmobile	Ninety-Eight	46819	79	90	71
Dodge	Diplomat	5390	67	107	72
Oldsmobile	Delta 88	79213	81	90	73
Chrysler	New Yorker 5th Ave	35031	71	105	74
Buick	Electra	45105	80	97	78
Buick	LeSabre	29105	85	93	79
STATION WAGONS/PASSENGER VANS		**264048**	**76**	**78**	**59**
Pontiac	Parisienne	5294	68	65	44
Plymouth	Voyager	56724	72	75	54
Chevrolet	Astro Van	41483	89	62	55
Dodge	Caravan	57686	71	77	55
Oldsmobile	Custom Cruiser	8465	79	77	61
Chevrolet	Caprice	14901	79	79	62
Ford	Crown Victoria	6561	68	93	63
GMC	Safari Van	8586	91	72	65
Buick	LeSabre	2986	76	86	65
Ford	Aerostar	53469	72	93	67
Buick	Electra	3632	78	89	69
Mercury	Grand Marquis	3516	80	112	90
SPORTS & SPECIALTY		**163269**	**87**	**113**	**98**
Cadillac	Brougham	18323	81	100	81
Cadillac	DeVille 4D	55490	84	105	87
Lincoln	Town Car	40215	92	99	91
Cadillac	DeVille 2D	17573	88	108	94
Jaguar	XJ6	7620	89	143	127
Mercedes	420/560SEL/300SDL	10296	90	149	134
Mercedes	300E	10562	97	140	135
BMW	735i	1772	106	199	210

(See notes on page 27.)

TABLE 6
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
All	All	8783337	100 =	100 =	100 =
			10.1	$ 1,687	$ 170
		SMALL CARS			
TWO-DOOR MODELS		1153046	120	103	123
Toyota	Tercel	37619	98	89	87
Ford	Escort	73423	102	87	89
Chevrolet	Chevette	38339	109	84	92
Mercury	Lynx	12630	109	88	95
Chevrolet	Spectrum	18602	103	93	96
Mazda	GLC	20376	106	93	98
Chevrolet	Sprint	20077	108	96	104
Honda	Civic	56298	118	88	104
Renault	Alliance	25756	118	91	107
Pontiac	1000	6101	111	97	108
Subaru	Hatchback	10299	112	97	108
Dodge	Colt	15897	117	93	109
Honda	Accord	69009	104	106	110
Volkswagen	Golf	23052	115	96	111
Volkswagen	Jetta	11998	115	98	112
Renault	Encore	29474	118	96	114
Nissan	Sentra	89233	123	95	116
Plymouth	Colt	13377	117	100	117
Plymouth	Turismo	49245	122	99	121
Honda	Prelude	70910	117	105	122
Isuzu	I-Mark	2396	116	106	123
Subaru	Hatchback 4WD	3297	116	106	123
Mazda	626	23591	130	100	130
Nissan	Pulsar	45625	117	112	132
Toyota	Celica	66891	121	111	135
Dodge	Charger	50724	126	108	136
Mitsubishi	Mirage	9318	136	103	140
Chrysler	Laser	45959	130	108	140
Toyota	Corolla	43024	132	112	147
Dodge	Daytona	41547	138	110	151

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
Isuzu	Impulse	12246	145	107	156
Saab	900	20347	116	141	163
Nissan	200SX	45113	141	116	164
Subaru	XT Coupe 4WD	1293	158	106	168
Subaru	XT Coupe	6904	177	97	172
Mitsubishi	Cordia	8209	161	114	183
Volkswagen	GTI	11721	180	103	185
Renault	Fuego	2161	159	124	198
Plymouth	Conquest	2062	148	133	198
Volkswagen	Scirocco	11063	167	134	224
Mitsubishi	Starion	5728	158	155	246
Dodge	Conquest	2040	161	162	260
FOUR-DOOR MODELS		**1061632**	**106**	**95**	**101**
Mercury	Lynx	5887	86	88	76
Toyota	Tercel	17601	92	90	83
Ford	Escort	34075	97	85	83
Plymouth	Horizon	80516	98	90	88
Toyota	Corolla	117205	97	92	89
Dodge	Omni	64969	100	90	90
Chevrolet	Chevette	34689	107	86	91
Chevrolet	Nova	17253	105	87	91
Honda	Accord	189290	98	100	98
Renault	Alliance	30013	108	91	99
Volkswagen	Golf	23133	110	90	99
Chevrolet	Spectrum	19846	109	93	101
Nissan	Stanza	45225	100	104	104
Renault	Encore	11808	108	100	108
Honda	Civic	51246	118	92	109
Mazda	626	62901	112	98	110
Isuzu	I-Mark	5633	108	102	110
Mazda	GLC	30950	113	98	110
Nissan	Sentra	56897	117	94	111
Pontiac	1000	4176	120	94	112
Volkswagen	Jetta	55070	119	97	116
Plymouth	Colt	12314	116	103	120

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
Subaru	DL/GL	40429	125	97	121
Dodge	Colt	15123	119	104	123
Saab	900	16730	113	122	137
Mitsubishi	Tredia	9474	130	107	139
Subaru	GL 4WD	9176	148	108	160
STATION WAGONS/PASSENGER VANS		**247906**	**98**	**88**	**86**
Ford	Escort	25239	81	83	67
Toyota	Tercel	15802	82	86	70
Volkswagen	Vanagon	10629	120	60	72
Mercury	Lynx	3742	81	90	73
Toyota	Tercel 4WD	19300	81	91	74
Toyota	Van	33184	109	71	77
Honda	Civic	25190	85	96	81
Honda	Civic 4WD	7647	89	95	84
Subaru	DL/GL	35739	102	93	94
Nissan	Sentra	26977	101	96	97
Subaru	DL/GL 4WD	42353	111	95	105
Renault	Sportwagon	2028	114	111	126
SPORTS & SPECIALTY		**375406**	**127**	**123**	**156**
Renault	Alliance Conv.	4964	116	94	109
Ford	EXP	24707	128	94	120
Toyota	Celica Conv.	1258	113	116	132
Mercedes	380SL Conv.	8050	65	203	132
Honda	Civic CRX	57270	129	105	135
Volkswagen	Cabriolet	9955	115	122	140
Porsche	911 Coupe	3708	72	195	141
Pontiac	Fiero	61345	140	102	143
Mazda	RX-7	60557	144	102	148
Alfa Romeo	Spider Conv.	1912	124	122	151
Chevrolet	Corvette	33254	85	204	173
Nissan	300ZX 2+2	17632	113	153	173
Toyota	MR2	19581	153	114	174
Porsche	928 Coupe	1358	122	151	184
Audi	4000 Quattro	3196	145	133	193
Nissan	300ZX	50238	118	167	198
Porsche	944 Coupe	13574	131	175	229

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS			
TWO-DOOR MODELS		**1205144**	**105**	**97**	**102**
Pontiac	6000	6257	88	87	76
Chevrolet	Celebrity	24731	90	89	80
Oldsmobile	Cutlass Ciera	29130	85	101	86
Oldsmobile	Cutlass	140248	86	100	86
Chevrolet	Citation	4707	90	97	88
Dodge	Aries	17959	95	95	91
Plymouth	Reliant	21459	98	93	91
Pontiac	Grand Prix	45972	95	96	91
Ford	Tempo	54968	112	82	92
Buick	Regal	94142	102	91	93
Chrysler	LeBaron	22949	100	96	96
Chevrolet	Monte Carlo	87562	95	106	100
Dodge	600	10681	98	103	101
Buick	Century	9851	100	102	102
Mercury	Topaz	12144	115	90	104
Pontiac	Sunbird	37912	114	92	105
Oldsmobile	Calais	87823	113	93	105
Buick	Somerset	70068	116	93	108
Pontiac	Grand Am	65865	108	100	109
Buick	Skyhawk	40303	114	96	110
Oldsmobile	Firenza	5041	119	94	112
Ford	Thunderbird	115659	104	111	115
Chevrolet	Cavalier	105589	134	87	116
Mercury	Cougar	91695	109	109	120
Audi	GT Coupe	2429	177	135	239
FOUR-DOOR MODELS		**1948311**	**92**	**94**	**87**
Pontiac	Bonneville	37576	73	87	63
Oldsmobile	Cutlass	48446	77	89	68
American	Eagle	2020	63	113	72
Chevrolet	Citation	23907	85	85	73
Toyota	Camry	116210	82	92	76
Chevrolet	Celebrity	151370	83	92	76
Dodge	Aries	44965	85	90	77
Ford	LTD	95826	80	97	78

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
Buick	Skylark	58362	90	87	78
Plymouth	Caravelle	29052	87	91	79
Mercury	Marquis	68095	83	96	79
Dodge	600	23834	85	94	80
Oldsmobile	Cutlass Ciera	178326	83	98	82
Plymouth	Reliant	50089	87	95	83
Ford	Tempo	167885	99	84	84
Oldsmobile	Firenza	21088	98	85	84
Chrysler	LeBaron	38467	89	94	84
Pontiac	6000	87132	92	91	84
Mercury	Topaz	44747	101	86	86
Buick	Century	153674	91	95	86
Chrysler	New Yorker	51490	89	100	89
Chevrolet	Cavalier	124067	112	82	92
Buick	Skyhawk	16864	103	91	93
Cadillac	Cimarron	16155	97	101	97
Toyota	Cressida	36245	100	98	98
Dodge	Lancer	35498	97	102	98
Pontiac	Sunbird	30951	106	94	99
Chrysler	LeBaron GTS	48746	100	100	100
Volvo	240	31935	98	104	102
Nissan	Maxima	71376	105	121	127
Volkswagen	Quantum	8192	125	105	132
Mitsubishi	Galant	8791	123	111	136
Peugeot	505	13159	136	124	168
Audi	4000	13771	138	125	173
STATION WAGONS/PASSENGER VANS		**339429**	**85**	**92**	**78**
American	Eagle	9041	68	89	60
Buick	Skyhawk	3515	81	81	65
Chevrolet	Celebrity	60735	76	90	68
Oldsmobile	Cutlass Ciera	29437	79	88	70
Oldsmobile	Firenza	6295	84	85	72
Plymouth	Reliant	21221	79	91	72
Dodge	Aries	20283	81	91	74
Pontiac	6000	12256	89	83	74
Ford	LTD	25929	77	97	75

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
Mercury	Marquis	7436	70	111	78
Buick	Century	21355	83	96	79
Chevrolet	Cavalier	50523	102	79	81
Pontiac	Sunbird	5213	96	86	82
Chrysler	LeBaron	6163	71	117	84
Toyota	Cressida	2599	90	100	90
Plymouth	Colt Vista	7851	88	102	90
Dodge	Colt Vista	9144	92	106	98
Volkswagen	Quantum	3618	106	93	98
Volvo	240	21285	94	109	102
Nissan	Maxima	14058	94	125	117
SPORTS & SPECIALTY		**608486**	**123**	**121**	**149**
Mercedes	300CD	1770	95	91	86
Pontiac	Sunbird Conv.	1501	99	102	101
Dodge	600 Conv.	10716	102	99	101
Chrysler	LeBaron Conv.	13457	101	105	105
Volvo	740/760	34718	102	108	110
Lincoln	Mark VII	11664	92	122	112
Lincoln	Continental	16784	96	124	119
Chevrolet	Cavalier Conv.	2958	116	102	119
Volvo	740/760 SW	4643	109	117	127
Ford	Mustang	113962	111	118	130
Mercedes	190D/E	23507	116	115	133
Mercury	Capri	12581	110	122	133
Ford	Mustang Conv.	12323	106	128	135
Chevrolet	Camaro	133378	137	110	150
BMW	318i/325e 4D	17807	122	133	162
BMW	500 series	14853	102	164	168
Audi	5000	40092	116	146	168
Toyota	Celica Supra	23969	131	129	169
Pontiac	Firebird	72236	153	117	179
Audi	5000 SW	2302	123	149	183
Merkur	XR4Ti	8402	126	148	187
BMW	318i/325e 2D	29760	131	146	191
BMW	635CSi	2349	87	240	209
Jaguar	XJ-S	2614	111	230	255

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS			
TWO-DOOR MODELS		**118213**	**77**	**87**	**67**
Oldsmobile	Delta 88	41023	75	85	63
Mercury	Grand Marquis	9175	73	88	64
Buick	LeSabre	24221	78	84	66
Ford	Crown Victoria	12197	68	97	66
Chevrolet	Caprice	13238	80	89	71
Oldsmobile	Ninety-Eight	13512	89	84	74
Buick	Electra	4846	82	100	83
FOUR-DOOR MODELS		**910824**	**74**	**90**	**67**
Mercury	Grand Marquis	103332	65	86	55
Ford	Crown Victoria	94936	63	90	56
Oldsmobile	Delta 88	124899	71	82	58
Chevrolet	Impala	18891	77	76	59
Buick	LeSabre	85768	69	87	60
Chevrolet	Caprice	95039	76	81	62
Pontiac	Parisienne	43842	74	83	62
Plymouth	Gran Fury	9759	70	98	69
Dodge	Diplomat	19881	71	100	70
Chrysler	New Yorker 5th Ave	93037	74	105	77
Oldsmobile	Ninety-Eight	122472	86	94	81
Buick	Electra	98968	89	97	86
STATION WAGONS/PASSENGER VANS		**328941**	**79**	**80**	**63**
GMC	Safari Van	6584	82	68	55
Chevrolet	Astro Van	25171	87	68	59
Dodge	Caravan	98231	77	78	60
Plymouth	Voyager	96134	78	79	61
Pontiac	Parisienne	12027	76	82	62
Chevrolet	Caprice	34663	77	82	63
Oldsmobile	Custom Cruiser	15894	84	78	65
Buick	LeSabre	3751	87	78	68
Ford	Crown Victoria	19345	78	93	73
Mercury	Grand Marquis	9224	78	96	75
Buick	Electra	4633	89	96	85
Peugeot	505	3285	87	121	106

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1995 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS (CONTD)			
SPORTS & SPECIALTY		**485998**	**86**	**114**	**98**
Buick	Riviera	44953	80	100	80
Oldsmobile	Toronado	29371	79	107	84
Cadillac	Brougham 2D	5723	89	100	89
Cadillac	DeVille 4D	120650	87	104	90
Lincoln	Town Car	71344	90	101	91
Mercedes	500SEC	1059	50	182	92
Cadillac	DeVille 2D	38644	89	111	100
Cadillac	Eldorado	54688	82	122	100
Cadillac	Brougham 4D	33299	89	114	101
Cadillac	Seville	26536	81	143	115
Mercedes	300SD/380SE	14627	79	147	116
Mercedes	300TD	2432	89	137	121
Mercedes	300D	17035	91	133	122
Mercedes	500SEL	5281	93	142	133
Cadillac	Eldorado Conv.	1480	84	170	144
Jaguar	XJ6	12176	98	164	160
BMW	735i	5778	120	139	167

NOTES FOR TABLES 4, 5, and 6:

Results are standardized to the distribution:

Deductible	Youthful Operator	No Youthful Operator
<$150	5%	50%
≥$150	5%	40%

Series are ranked within group and subgroup by ascending average loss payment per insured vehicle year. Series with less than 1,000 insured vehicle years of exposure are not summarized.

Vans, Pickups, and Utility Vehicles

This section presents the results for 1985, 1986, and 1987 model year vans, pickups, and utility vehicles insured under noncommercial collision coverages. The results for the 1987 models are based on a total exposure of almost 350,000 insured vehicle years, those for 1986 models on approximately 1.4 million insured vehicle years, and those for 1985 models on over 2.3 million insured vehicle years. Results for individual vehicle series with less than 1,000 insured vehicles years of exposure are not given.

The results for the pickups are given separately for small and standard pickups. Small pickups are defined as those with curb weight of less than 3,200 pounds. The results for utility vehicles are given separately for three size classes: small utility vehicles with wheelbases less than 100 inches, intermediate utility vehicles with wheelbases in the range of 100-120 inches, and large utility vehicles with wheelbases exceeding 120 inches.

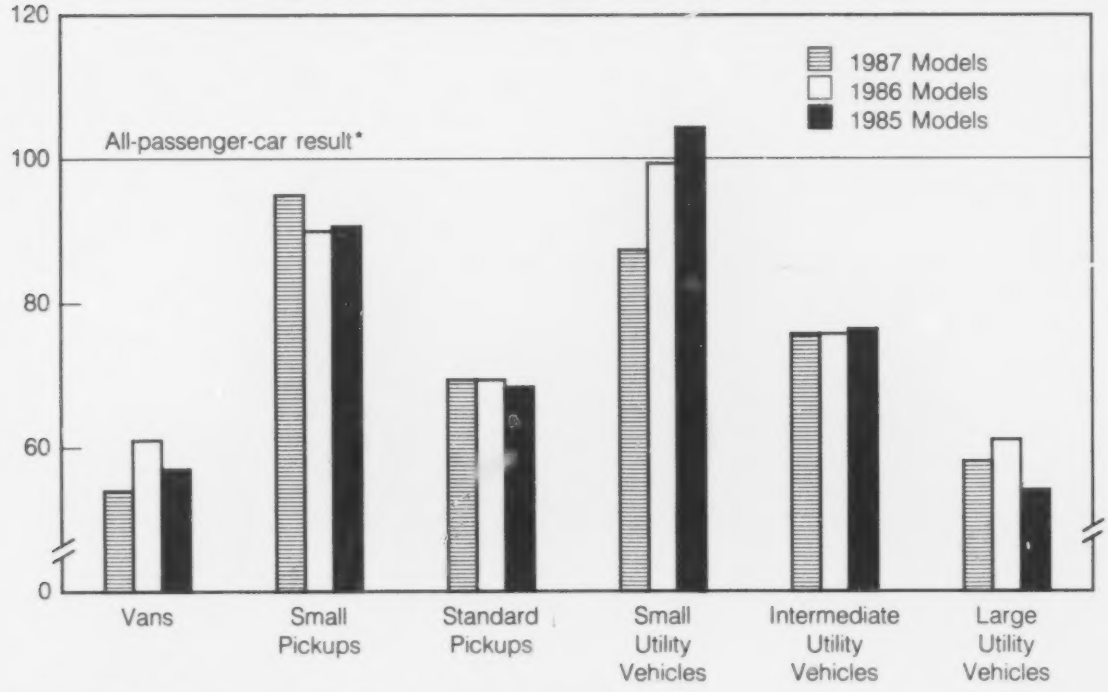
Figure 1 presents relative average loss payments per insured vehicle year for 1985, 1986, and 1987 model year vans, pickups, and utility vehicles. These results are presented in relative terms with the value 100 corresponding to the result for all passenger cars combined for each model year. Thus, the value 54 for the 1987 model year vans indicates an average loss payment per insured vehicle year that was 54 percent of the $194 for all 1987 passenger vehicles.

Vans and large utility vehicles had the lowest average loss payments per insured vehicle year, and small pickups and small utility vehicles had the highest. In particular, the 1985 and 1986 small utility vehicles had the highest collision losses. For these model years, the Ford Bronco II and Jeep CJ-7 accounted for a substantial portion of the small utility vehicle exposure. However, for the 1987 model year, the Jeep CJ-7 was discontinued and the Ford Bronco II represented less than 40 percent of the small utility vehicle exposure.

Tables 7, 8, and 9 present detailed collision coverage results for all 1985, 1986, and 1987 model year vans, pickups, and utility vehicles with at least 1,000 insured vehicle years of exposure. The values displayed are total exposure in insured vehicle years and relative values for claim frequency, average loss payment per claim, and average loss payment per insured vehicle year. The relative numbers are based on the value 100, which corresponds to the result for all passenger cars combined in each loss category for each model year.

Relationships between vehicle size and collision losses are apparent from these results. For pickup trucks and utility vehicles, the smaller vehicles displayed larger average loss payments per insured vehicle year than larger vehicles. For each of the three model years, small, intermediate, and large utility vehicles had similar claim frequencies, but the average loss payments per claim decreased as vehicle size increased. However, for pickups the average loss payments per claim were similar for the two size classes, but the small pickups had substantially higher claim frequencies.

Figure 1 Collision Coverages — Relative Average Loss Payment Per Insured Vehicle Year 1985-1987 Model Year Vans, Pickups, and Utility Vehicles



*All-passenger-car results = $194 for 1987, $185 for 1986, $170 for 1985

1987 Models During Their First Year

Table 7 (page 30) presents detailed collision coverage results for 1987 model year vans, pickups, and utility vehicles during their first year.

The Dodge B150 Cargo Van had the lowest relative average loss payment per insured vehicle year; its result was less than one-third the result for all 1987 passenger cars. The GMC Vandura (3/4T) van and Chevrolet Suburban (1/2T) utility vehicle also had average loss payments per insured vehicle year that were less than half the 1987 all-passenger-car result. The Toyota 4Runner standard pickup had the highest average loss payment per insured vehicle year. The Chevrolet 20 Series (3/4T) standard pickup had the lowest claim frequency and the Toyota 4Runner standard pickup had the highest. The Dodge B150 Cargo Van and GMC Vandura (3/4T) had the two lowest average loss payments per claim. The Ford Bronco II and Dodge Raider, both of which are small utility vehicles, had the two highest average loss payments per claim. The results for all three collision loss measures for the Toyota Xtra Cab, Dodge Ram 50/D50, Toyota Long Bed (1/2T), Toyota Standard Bed — all small pickups — and the Toyota 4Runner standard pickup exceeded the 1987 all-passenger-car averages. For all of the domestic vans and the two large utility vehicles cited in Table 7, each of the three collision loss measures were less than the all-passenger-car results.

1986 Models During Their First Two Years

Table 8 (page 32) presents detailed collision coverage results for 1986 model year vans, pickups, and utility vehicles. The results displayed are the combined results for the first two years of the 1986 models.

The Dodge B150 (1/2T) van had the lowest average loss payment per insured vehicle year. The Dodge B250 (3/4T), Ford E-150 Club Wagon (1/2—3/4T) — both of which are vans — and GMC Suburban (1/2T) utility vehicle also had average loss payments per insured vehicle year that were less than half the 1986 all-passenger-car value. The Toyota 4Runner Wagon — an intermediate utility vehicle — had the highest average loss payment per insured vehicle year. The Dodge B150 (1/2T) had the lowest claim frequency and the Toyota 4Runner Wagon had the highest. The Volkswagen Vanagon Camper and GMC Vandura (3/4T) had the two lowest average loss payments per claim. The Jeep CJ-7 had the highest average loss payment per claim. Toyota products — the Standard Bed, Xtra Cab, and 4Runner pickup trucks, and the 4Runner Wagon utility vehicle — were the only vehicles that exceeded the 1986 passenger car results in all three collision loss categories.

1985 Models During Their First Three Years

Table 9 (page 35) presents detailed collision coverage results for 1985 model year vans, pickups, and utility vehicles. The results displayed are the combined results for the first three years of the 1985 models.

The Ford E-150 Club Wagon (1/2—3/4T) had the lowest average loss payment per insured vehicle year. Four other vans also had a result that was less than half the 1985 all-passenger-car result: the Dodge B150 (1/2T), GMC Vandura (1/2T), Ford E-250 Club Wagon (3/4T), and GMC Rally Wagon (3/4T). As with the 1986 model year results, the Toyota 4Runner Wagon had the highest average loss payment per insured vehicle year. The Jeep Scrambler (a small pickup) had the lowest claim frequency and the Subaru Brat (also a small pickup) had the highest. As was the case for the 1986 model year results, the Volkswagen Vanagon Camper's average loss payment per claim was the lowest and the Jeep CJ-7's result was the highest.

For the four large utility vehicles and all the domestic vans reported in Table 9, each of the three collision loss results was less than the all-passenger-vehicle results. The three collision loss results for the Dodge Ram 50/D50, Toyota Xtra Cab, Toyota Standard Bed, and Toyota 4Runner pickup trucks, and the Toyota 4Runner Wagon utility vehicle equalled or exceeded the 1985 all-passenger-car averages.

TABLE 7
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		VANS			
ALL VANS		**32112**	**83**	**65**	**54**
Dodge	B150 Cargo Van	1324	72	41	29
GMC	Vandura (3/4T)	1260	87	42	37
Chevrolet	Chevy Van (3/4T)	4843	87	57	50
Ford	E-150 Econoline (1/2-3/4T)	7454	85	59	50
Ford	E-150 Club Wagon (1/2-3/4T)	1153	82	65	53
Chevrolet	Astro Cargo Van	3786	93	59	54
Dodge	B250 Cargo Van	4077	72	98	71
Toyota	Cargo Van	1514	100	80	80
		PICKUPS			
SMALL PICKUPS		**141809**	**99**	**95**	**95**
Dodge	Ram 50 Long Bed	2632	88	68	59
Nissan	King Cab	2752	84	83	70
Jeep	Comanche	2865	90	86	77
Mazda	Long Bed	3694	101	77	77
GMC	S15	3910	82	96	79
Mazda	Cab Plus	9062	101	79	79
Ford	Ranger Super Cab	9060	92	87	80
Chevrolet	S10	19411	94	93	88
Mazda	Standard Bed	14776	105	86	90
Ford	Ranger	23140	88	103	91
Nissan	Standard Bed	11253	102	94	96
Isuzu	Standard Bed	1633	90	108	98
Mitsubishi	Standard Bed	4034	117	91	107
Toyota	Xtra Cab	3559	105	103	107
Toyota	Xtra Cab Long Bed	1650	121	89	108
Dodge	Ram50/D50	6681	107	102	109
Toyota	Long Bed (1/2T)	2505	122	102	125
Toyota	Standard Bed	17517	116	111	129
STANDARD PICKUPS		**77851**	**71**	**98**	**69**
Chevrolet	20 Series (3/4T)	2955	55	90	50
Ford	F-250 Super Cab	1879	71	75	53
Ford	F-150 (1/2-3/4T)	16611	63	87	55

(See notes on page 37.)

TABLE 7 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
	PICKUPS (CONTD)				
Ford	F-250 (3/4T)	3851	60	98	59
Chevrolet	El Camino	1123	70	87	61
Dodge	Dakota (1/2T)	14851	70	87	61
Ford	F-150 Super Cab	2977	71	95	67
GMC	1500 Series (1/2T)	4266	67	110	74
Chevrolet	10 Series (1/2T)	17571	72	106	77
Dodge	D150/W150 (1/2T)	6094	77	99	77
Toyota	4Runner	3746	126	116	146
	UTILITY VEHICLES				
SMALL UTILITY VEHICLES		**34844**	**78**	**112**	**87**
Jeep	Wrangler	7374	66	102	67
Mitsubishi	Montero	1479	70	105	73
Suzuki	Samurai Van	2197	71	113	80
Suzuki	Samurai	7518	86	96	83
Dodge	Raider	2648	77	121	94
Ford	Bronco II	13627	81	122	98
INTERMEDIATE UTILITY VEHICLES		**54586**	**76**	**100**	**76**
Isuzu	Trooper II	1294	73	78	57
Ford	Bronco	3928	63	93	59
Jeep	Grand Wagoneer	1620	69	94	65
Jeep	Wagoneer	1557	72	96	69
Dodge	AD150/AW150 (1/2T)	2443	69	100	69
Chevrolet	K10 Blazer (1/2T)	2823	69	105	72
Chevrolet	S10 Blazer	17568	79	94	74
Jeep	Cherokee	13812	72	105	75
GMC	S15 Jimmy	3892	85	103	88
Nissan	Pathfinder	3832	99	115	113
LARGE UTILITY VEHICLES		**6264**	**76**	**77**	**58**
Chevrolet	Suburban (1/2T)	3501	79	54	43
GMC	Suburban (1/2T)	1385	76	74	56

(See notes on page 37.)

TABLE 8
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		VANS			
ALL VANS		**163909**	**83**	**73**	**61**
Dodge	B150 (1/2T)	4126	58	69	40
Dodge	B250 (3/4T)	4568	66	64	43
Ford	E-150 Club Wagon (1/2-3/4T)	4498	68	63	43
Ford	E-150 Econoline (1/2-3/4T)	37027	82	63	51
Ford	E-250 Econoline (3/4T)	2575	73	71	52
Chevrolet	Sportvan (3/4T)	5212	74	75	55
GMC	Vandura (3/4T)	7350	94	60	56
Chevrolet	Chevy Van (3/4T)	27567	85	70	59
Dodge	B250 Cargo Van	14071	72	85	61
Chevrolet	Chevy Van (1/2T)	4486	83	76	63
Dodge	B150 Cargo Van	5369	73	90	66
Volkswagen	Vanagon Camper	1258	113	59	67
Chevrolet	Astro Cargo Van	15167	96	71	69
GMC	Safari Cargo Van	3316	105	68	71
Dodge	Mini Ram/Royal Van	2743	91	82	75
Ford	Aerostar Cargo Van	10170	78	100	78
Toyota	Cargo Van	11670	105	84	88
		PICKUPS			
SMALL PICKUPS		**573656**	**94**	**96**	**90**
Ford	Ranger Super Cab	30030	83	85	70
Mazda	Long Bed	19530	90	80	72
GMC	S15	12689	83	88	73
Mazda	Cab Plus	15789	91	80	73
Chevrolet	S10	62534	80	92	74
Jeep	Comanche Long Bed	16764	90	85	76
Isuzu	Long Bed	5436	84	94	79
Isuzu	Standard Bed	23301	87	92	80
Isuzu	Long Cab (1/2T)	4117	103	80	82
Toyota	Xtra Cab Long Bed	11159	100	84	85
Mazda	Standard Bed	51328	97	90	87
Ford	Ranger	85744	86	104	89
Nissan	King Cab	24439	97	95	92
Nissan	Standard Bed	41416	100	94	94
Toyota	Long Bed (1/2T)	19921	100	97	97

(See notes on page 37.)

TABLE 8 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		PICKUPS (CONTD)			
Nissan	Long Bed	4683	92	109	100
Dodge	Ram50/D50	33705	104	96	100
Subaru	Brat	1434	118	91	108
Toyota	Standard Bed	76426	108	104	112
Mitsubishi	Standard Bed	12473	120	96	116
Toyota	Xtra Cab	20739	105	112	117
STANDARD PICKUPS		**375311**	**71**	**97**	**69**
Ford	F-250 Super Cab	13387	70	75	53
GMC	2500 Series (3/4T)	4965	61	88	53
Chevrolet	20 Series (3/4T)	15947	63	87	55
Ford	F-150 Super Cab	17976	74	85	63
Ford	F-150 (1/2-3/4T)	120973	67	95	64
Chevrolet	10 Series (1/2T)	91981	69	98	67
Chevrolet	El Camino	6858	64	106	68
GMC	1500 Series (1/2T)	22565	71	98	69
Ford	F-250 (3/4T)	31282	68	109	74
Dodge	D150/W150 (1/2T)	30576	79	103	81
Dodge	D250/W250 (3/4T)	4853	83	106	88
Toyota	4Runner	12052	114	112	128
		UTILITY VEHICLES			
SMALL UTILITY VEHICLES		**77673**	**78**	**126**	**99**
Suzuki	Samurai Van	2717	71	92	66
Suzuki	Samurai	8697	91	97	88
Mitsubishi	Montero	1959	88	106	93
Jeep	CJ-7	12208	69	145	100
Ford	Bronco II	52091	78	130	102

(See notes on page 37.)

TABLE 8 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		UTILITY VEHICLES (CONTD)			
INTERMEDIATE UTILITY VEHICLES		**212876**	**76**	**100**	**76**
GMC	S15 Jimmy	12780	78	86	66
Ford	Bronco	23227	68	104	71
GMC	Jimmy (1/2T)	3231	72	100	72
Chevrolet	S10 Blazer	58675	77	95	74
Jeep	Cherokee	53419	71	104	74
Isuzu	Trooper II	26848	84	90	76
Jeep	Wagoneer	5359	75	109	81
Dodge	AD150/AW150 (1/2T)	4354	78	105	82
Chevrolet	K10 Blazer (1/2T)	14599	69	124	85
Jeep	Grand Wagoneer	5786	82	110	89
Toyota	4Runner Wagon	3853	134	101	135
LARGE UTILITY VEHICLES		**27415**	**76**	**80**	**61**
GMC	Suburban (1/2T)	4734	71	69	49
Chevrolet	Suburban (1/2T)	16084	77	74	57
GMC	Suburban (3/4T)	1656	81	84	68
Chevrolet	Suburban (3/4T)	4941	75	109	82

(See notes on page 37.)

TABLE 9
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		VANS			
ALL VANS		**301889**	**81**	**71**	**57**
Ford	E-150 Club Wagon (1/2-3/4T)	10723	65	66	43
Dodge	B150 (1/2T)	8494	68	64	44
GMC	Vandura (1/2T)	1201	73	64	46
Ford	E-250 Club Wagon (3/4T)	1596	63	75	47
GMC	Rally Wagon (3/4T)	2454	74	64	47
Ford	E-150 Econoline (1/2-3/4T)	72196	78	65	50
Chevrolet	Sportvan (3/4T)	13376	73	69	50
Ford	E-250 Econoline (3/4T)	4429	68	76	52
Chevrolet	Chevy Van (3/4T)	52109	77	70	53
Dodge	B250 (3/4T)	9561	72	75	54
GMC	Safari Cargo Van	7162	94	63	59
Dodge	B250 Cargo Van	26735	79	75	60
Dodge	B150 Cargo Van	9133	71	86	61
Volkswagen	Vanagon Camper	4006	101	60	61
GMC	Vandura (3/4T)	13715	86	72	61
Chevrolet	Chevy Van (1/2T)	7675	77	82	63
Chevrolet	Astro Cargo Van	28274	94	71	66
Dodge	Mini Ram/Royal Van	11130	88	85	75
Toyota	Cargo Van	16767	105	82	86
		PICKUPS			
SMALL PICKUPS		**798272**	**93**	**98**	**91**
Jeep	Scrambler	1117	60	106	64
GMC	S15	33601	81	90	73
Isuzu	Standard Bed	13520	86	86	75
Isuzu	Long Bed	9521	83	90	75
Chevrolet	S10	150626	80	94	76
Ford	Ranger	170377	82	105	87
Nissan	King Cab	74015	98	95	93
Nissan	Long Bed	10714	101	93	95
Toyota	Long Bed (1/2T)	43256	100	97	97
Nissan	Standard Bed	79887	104	93	97
Mitsubishi	Standard Bed	16274	114	90	103
Dodge	Ram50/D50	41828	103	100	103

(See notes on page 37.)

TABLE 9 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		PICKUPS (CONTD)			
Toyota	Xtra Cab	66215	107	100	106
Toyota	Standard Bed	84245	105	106	112
Subaru	Brat	3075	129	96	124
STANDARD PICKUPS		**669242**	**71**	**95**	**68**
Ford	F-150 Super Cab	22449	75	74	55
Chevrolet	20 Series (3/4T)	33781	66	85	57
GMC	2500 Series (3/4T)	10265	62	96	60
GMC	Caballero	1619	68	91	62
Ford	F-250 Super Cab	18294	72	85	62
Ford	F-150 (1/2-3/4T)	198371	67	95	64
Chevrolet	10 Series (1/2T)	173324	71	92	65
GMC	1500 Series (1/2T)	46443	70	93	65
Ford	F-250 (3/4T)	51770	68	100	69
Chevrolet	El Camino	14311	76	101	76
Dodge	D250/W250 (3/4T)	9724	81	100	81
Dodge	D150/W150 (1/2T)	77064	78	105	83
Toyota	4Runner	9731	104	117	121
		UTILITY VEHICLES			
SMALL UTILITY VEHICLES		**118871**	**80**	**130**	**104**
Mitsubishi	Montero	2621	77	102	79
Jeep	CJ-7	31986	70	146	102
Ford	Bronco II 4x4	83797	83	126	106
INTERMEDIATE UTILITY VEHICLES		**433441**	**76**	**101**	**77**
Toyota	Land Cruiser	3700	76	92	71
Chevrolet	S10 Blazer	173247	77	97	74
GMC	S15 Jimmy	37697	75	99	75
Ford	Bronco	37473	69	109	76
Chevrolet	K10 Blazer (1/2T)	26990	71	107	76

(See notes on page 37.)

TABLE 9 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		UTILITY VEHICLES (CONTD)			
Jeep	Cherokee	81747	75	101	76
Isuzu	Trooper II	10653	95	83	78
Dodge	AD150/AW150 (1/2T)	27950	75	105	79
GMC	Jimmy (1/2T)	6370	69	116	80
Jeep	Wagoneer	11798	75	112	85
Jeep	Grand Wagoneer	9259	82	120	99
Toyota	4Runner Wagon	6556	126	110	139
LARGE UTILITY VEHICLES		**48434**	**73**	**74**	**54**
Chevrolet	Suburban (3/4T)	9030	66	77	51
GMC	Suburban (1/2T)	8530	78	69	53
Chevrolet	Suburban (1/2T)	27716	74	73	54
GMC	Suburban (3/4T)	3159	65	97	63

NOTES FOR TABLES 7, 8, and 9:

Results are standardized to the distribution:

Deductible	Youthful Operator	No Youthful Operator
<$150	5%	50%
≥$150	5%	40%

Series are ranked within group and subgroup by ascending average loss payment per insured vehicle year.
Series with less than 1,000 insured vehicle years of exposure are not summarized.

Appendix A-1
1985-1987 Vehicle Series Designations

Passenger Cars

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
Acura	Integra	2Dr, 4Dr		S	S
	Legend*	2Dr[1], 4Dr		M	M
Alfa Romeo	GTV6*	2Dr	S	S	
	Milano	4Dr			S
	Spider*	Conv	S	S	S
American	Eagle	4Dr, SW	M	M	M
Aston Martin*	Lagonda	4Dr	L	L	L
	Saloon	2Dr	M	M	M
	Vantage	2Dr	M	M	M
	Volante	Conv	M	M	M
Audi	4000	4Dr	M	M	M
	4000 Quattro*	4Dr	S	S	S
	5000*	4Dr, SW	M	M	M
	5000 Quattro*	4Dr, SW		M	M
	GT Coupe	2Dr	M	M	M
	Quattro*	2Dr	S		
Austin Rover*	Sterling 825	4Dr			M
Avanti*	Avanti	2Dr, Conv[1]	M	M	M
Bentley*	Continental	Conv			L
	Corniche	Conv	L	L	
	Eight	4Dr			L
	Mulsanne	4Dr	L	L	L
	Mulsanne-L	4Dr	L	L	L

(See notes on page 46.)

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
BMW*	318i	2Dr, 4Dr	M		
	325e	2Dr, 4Dr	M	M	M
	325i	2Dr, 4Dr, Conv			M
	524TD	4Dr	M	M	M
	528e	4Dr	M	M	M
	535i	4Dr	M	M	M
	635CSi/L6	2Dr	M	M	M
	735i	4Dr	L	L	L
	L7	4Dr		L	L
	M6	2Dr			M
Buick	Century	2Dr, 4Dr, SW	M	M	M
	Electra	2Dr, 4Dr, SW	L	L	L
	LeSabre	2Dr, 4Dr, SW	L	L	L
	Regal	2Dr	M	M	M
	Riviera*	2Dr, Conv[4]	L	M	M
	Skyhawk	2Dr, 4Dr, SW	M	M	M
	Skylark	4Dr	M	M	M
	Somerset	2Dr	M	M	M
Cadillac	Allante*	Conv			S
	Brougham*	2Dr[4], 4Dr	L	L	L
	Cimarron	4Dr	M	M	M
	DeVille*	2Dr, 4Dr	L	L	L
	Eldorado*	2Dr, Conv[4]	L	M	M
	Fleetwood (DeVille)*	2Dr, 4Dr	L		
	Fleetwood d'Elegance*	4Dr			L
	Fleetwood Limo*	4Dr	L	L	L
	Seville*	4Dr	L	M	M
Chevrolet	Astro Van	PV	L	L	L
	Beretta	2Dr			M
	Camaro*	2Dr, Conv[1]	M	M	M
	Caprice	2Dr, 4Dr, SW	L	L	L
	Cavalier	2Dr, 4Dr, SW, Conv*	M	M	M
	Celebrity	2Dr, 4Dr, SW	M	M	M
	Chevette	2Dr, 4Dr	S	S	S
	Citation	2Dr, 4Dr	M		
	Corsica	4Dr			M
	Corvette*	2Dr, Conv[3]	S	S	S
	Impala	4Dr	L		
	Monte Carlo	2Dr	M	M	M
	Nova	4Dr	S	S	S
	Spectrum	2Dr, 4Dr	S	S	S
	Sprint	2Dr, 4Dr[3]	S	S	S

(See notes on page 46.)

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
Chrysler	Daytona	2Dr			S
	Laser	2Dr	S	S	
	LeBaron	2Dr, 4Dr, SW,Conv*	M	M	M
	LeBaron GTS	4Dr	M	M	M
	Limousine*	4Dr	L	L	
	New Yorker	4Dr	M	M	M
	New Yorker 5th Ave.	4Dr	L	L	L
	Newport	4Dr	L	L	L
Chrysler/ Plymouth/ Mitsubishi	Colt	2Dr, 4Dr	S	S	S
	Colt Vista	SW	M	M	M
	Colt Vista-4WD	SW	M	M	M
	Conquest	2Dr	S	S	S
Dodge	600	2Dr[6], 4Dr, Conv[6]*	M	M	M
	Aries	2Dr, 4Dr, SW	M	M	M
	Caravan	PV	L	L	L
	Charger	2Dr	S	S	S
	Daytona	2Dr	S	S	S
	Diplomat	4Dr	L	L	L
	Lancer	4Dr	M	M	M
	Omni	4Dr	S	S	S
	Shadow	2Dr, 4Dr			S
	Shelby	2Dr	S	S	S
Dodge/ Mitsubishi	Colt	2Dr, 4Dr	S	S	S
	Colt Vista	SW	M	M	M
	Colt Vista-4WD	SW	M	M	M
	Conquest	2Dr	S	S	
Ferrari*	308 Quattro	2Dr, Conv	S		
	328 GTB/GTS	2Dr, Conv		S	S
	Mondial Quattro	2Dr, Conv	M	M	M
	Testarossa	4Dr		M	M
Fiat*	Spider	Conv	S		
	X 1/9	2Dr	S	S	S

(See notes on page 46.)

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
Ford	Aerostar	PV		L	L
	Crown Victoria	2Dr, 4Dr, SW	L	L	L
	Escort	2Dr, 4Dr, SW	S**	S	S
	EXP*	2Dr	S	S	S
	LTD	4Dr, SW	M	M	
	Mustang*	2Dr, Conv	M	M	M
	Taurus	4Dr, SW		M	M
	Tempo	2Dr, 4Dr	M	M	M
	Tempo-4WD	2Dr, 4Dr			M
	Thunderbird	2Dr	M	M	M
GMC	Safari Van	PV	L	L	L
Honda	Accord	2Dr, 4Dr	S	M	M
	Civic	2Dr, 4Dr, SW	S	S	S
	Civic CRX*	2Dr	S	S	S
	Civic-4WD	SW	S	S	S
	Prelude	2Dr	S	S	S
Hyundai	Excel	2Dr, 4Dr		S	S
Isuzu	I-Mark	2Dr, 4Dr	S	S	S
	Impulse	2Dr	S	S	S
Jaguar*	XJ6	4Dr	L	L	L
	XJ-S	2Dr	M	M	M
	XJ-SC	Conv		M	M
Lincoln*	Continental	4Dr	M	M	M
	Mark VII	2Dr	M	M	M
	Town Car	4Dr	L	L	L
Lotus*	Esprit Turbo	2Dr	S	S	S

(See notes on page 46.)

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
Maserati*	425	4Dr		M	M
	Biturbo	2Dr	S	S	S
	Quattroporte	4Dr	L	L	L
	Spyder	Conv		S	S
Mazda	323	2Dr, 4Dr, SW[1]		S	S
	626	2Dr, 4Dr	S	S	S
	GLC	2Dr[4], 4Dr[4], SW	S	S	
	RX-7*	2Dr	S	S	S
Mercedes-Benz*	190D, E	4Dr	M	M	M
	260E	4Dr			L
	300CD	2Dr	M		
	300D	4Dr	L		L
	300E	4Dr		L	L
	300SD	4Dr	L		
	300SDL	4Dr		L	L
	300TD	SW	L		L
	380SE	4Dr	L		
	380SL	Conv	S		
	420SEL	4Dr		L	L
	500SEC	2Dr	L		
	500SEL	4Dr	L		
	560SEC	2Dr		L	L
	560SEL	4Dr		L	L
	560SL	Conv		S	S
Mercury	Capri*	2Dr	M	M	
	Cougar	2Dr	M	M	M
	Grand Marquis	2Dr, 4Dr, SW	L	L	L
	Lynx	2Dr, 4Dr, SW	S**	S	S
	Marquis	4Dr, SW	M	M	
	Sable	4Dr, SW		M	M
	Topaz	2Dr, 4Dr	M	M	M
	Tracer	2Dr, 4Dr			S
Merkur*	Scorpio	4Dr			M
	XR4Ti	2Dr	M	M	M

(See notes on page 46.)

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
Mitsubishi	Cordia	2Dr	S	S	S
	Galant	4Dr	M	M	M
	Mirage	2Dr, 4Dr[1]	S	S	S
	Starion	2Dr	S	S	S
	Tredia	4Dr	S	S	S
	Wagon	SW			S
Nissan	200SX	2Dr	S	S	S
	300ZX*	2Dr	S	S	S
	300ZX 2+2*	2Dr	S	S	S
	Maxima	4Dr, SW	M	M	M
	Pulsar	2Dr	S	S	S
	Sentra	2Dr, 4Dr, SW	S	S	S
	Sentra-4WD	SW			S
	Stanza	4Dr	S	S	M
	Stanza	SW		S	S
	Stanza-4WD	SW		S	S
	Van	SW			S
Oldsmobile	Calais	2Dr, 4Dr[3]	M	M	M
	Custom Cruiser	SW	L	L	L
	Cutlass	2Dr, 4Dr	M	M	M
	Cutlass Ciera	2Dr, 4Dr, SW	M	M	M
	Delta 88	2Dr, 4Dr	L	L	L
	Firenza	2Dr, 4Dr, SW	M	M	M
	Ninety-Eight	2Dr, 4Dr	L	L	L
	Toronado*	2Dr	L	M	M
Peugeot	505	4Dr	M	M	M
	505	SW	L	L	L
Plymouth	Caravelle	4Dr	M	M	M
	Gran Fury	4Dr	L	L	L
	Horizon	4Dr	S	S	S
	Reliant	2Dr, 4Dr, SW	M	M	M
	Sundance	2Dr, 4Dr			S
	Turismo	2Dr	S	S	S
	Voyager	PV	L	L	L

(See notes on page 46.)

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
Pontiac	1000	2Dr, 4Dr	S	S	S
	6000	2Dr, 4Dr, SW	M	M	M
	Bonneville	4Dr	M	M	L
	Fiero*	2Dr	S	S	S
	Firebird*	2Dr, Conv[1]	M	M	M
	Firefly	2Dr	S	S	S
	Grand Am	2Dr, 4Dr[3]	M	M	M
	Grand Prix	2Dr	M	M	M
	Parisienne	4Dr, SW[6]	L	L	L
	Safari Wagon	SW			L
	Sunbird	2Dr, 4Dr, SW, Conv*	M	M	M
Porsche*	911 Coupe	2Dr, Conv	S	S	S
	924 Coupe	2Dr			S
	928 Coupe	2Dr	S	S	S
	944 Coupe	2Dr	S	S	S
Renault	Alliance	2Dr, 4Dr, Conv*	S	S	S
	Encore	2Dr, 4Dr	S	S	
	Fuego	2Dr	S		
	GTA	2Dr, Conv*			S
	Sportwagon	SW	S	S	
Rolls Royce*	Camargue	2Dr	L	L	L
	Corniche	Conv	L	L	L
	Silver Spirit	4Dr	L	L	L
	Silver Spur	4Dr	L	L	L
Saab	900	2Dr, 4Dr, Conv[1]*	S	S	S
	9000*	4Dr		M	M
Subaru	DL/GL	2Dr[3], 4Dr, SW	S	S	S
	DL/GL-4WD	2Dr[3], 4Dr, SW	S	S	S
	Hatchback	2Dr	S	S	S
	Hatchback-4WD	2Dr	S	S	S
	Justy	2Dr			S
	XT Coupe	2Dr	S	S	S
	XT Coupe-4WD	2Dr	S	S	S
	XT Coupe DL*	2Dr	S	S	S

(See notes on page 46.)

Make	Series Name	Body Style	Vehicle Size Class 1985	1986	1987
Toyota	Camry	4Dr, SW[1]	M	M	M
	Celica	2Dr, Conv[5]*	S	S	S
	Celica Supra*	2Dr	M	M	
	Corolla	2Dr, 4Dr	S	S	S
	Corolla FX	2Dr			S
	Cressida	4Dr, SW	M	M	M
	MR2*	2Dr	S	S	S
	Supra*	2Dr		M	M
	Tercel	2Dr, 4Dr, SW	S	S	S
	Tercel-4WD	SW	S	S	S
	Van	PV	S	S	S
	Van-4WD	PV			S
TVR*	280i	2Dr, Conv	S	S	S
Volkswagen	Cabriolet*	Conv	S	S	S
	Fox	2Dr, 4Dr, SW			S
	Golf	2Dr, 4Dr	S	S	S
	GTI	2Dr	S	S	S
	Jetta	2Dr, 4Dr	S	S	S
	Quantum	4Dr, SW	M	M	M
	Quantum-4WD	SW	M	M	M
	Scirocco	2Dr	S	S	S
	Vanagon	PV	S	S	S
Volvo	240	4Dr, SW	M	M	M
	740/760*	4Dr, SW	M	M	M
	780*	2Dr			M
Yugo	Yugo	2Dr		S	S

(See notes on page 46.)

Size Class:

S (Small) — wheelbase (after rounding to nearest inch) less than 100.
M (Midsize) — wheelbase (after rounding to nearest inch) in the range 100-109.
L (Large) — wheelbase (after rounding to nearest inch) greater than 109.

Body Style Abbreviations:

2Dr — Two-door
4Dr — Four-door
Conv — Convertible
PV — Passenger Van
SW — Station Wagon

Notes:

1 1987 models only
2 1986 models only
3 1986 and 1987 models only
4 1985 models only
5 1985 and 1987 models only
6 1985 and 1986 models only

* These cars are classified as sports or specialty models.
** Due to mid-year design changes, only collision loss data for the redesigned models were used.

Appendix A-2
1985-1987 Vehicle Series Designations

Vans, Pickup Trucks, and Utility Vehicles

Make	Series Name	Vehicle Type	Size Class	Model Years
Chevrolet	Astro Cargo Van	Van		85-87
	Chevyvan (1/2 T)	Van		85-87
	Chevyvan (3/4 T)	Van		85-87
	Sportvan (1/2 T)	Van		85-87
	Sportvan (3/4 T)	Van		85-87
	S10	Pickup	Small	85-87
	S10 Extended Cab	Pickup	Small	87
	El Camino	Pickup	Standard	85-87
	10 Series (1/2 T)	Pickup	Standard	85-87
	20 Series (3/4 T)	Pickup	Standard	85-87
	20 Series Crew Cab (3/4 T)	Pickup	Standard	85-87
	K10 Blazer (1/2 T)	Util. Veh.	Intermediate	85-87
	S10 Blazer	Util. Veh.	Intermediate	85-87
	Suburban (1/2 T)	Util. Veh.	Large	85-87
	Suburban (3/4 T)	Util. Veh.	Large	85-87
Dodge	B150 (1/2 T)	Van		85-87
	B150 Cargo Van	Van		85-87
	B250 (3/4 T)	Van		85-87
	B250 Cargo Van	Van		85-87
	Mini-Ram/Royal	Van		85-87
	Ram 50/D50	Pickup	Small	85-87
	Ram 50 Long Bed	Pickup	Small	87
	Dakota	Pickup	Standard	87
	D150/W150 (1/2 T)	Pickup	Standard	85-87
	D250/W250 (3/4 T)	Pickup	Standard	85-87
	Raider	Util. Veh.	Small	87
	AD150/AW150 (1/2 T)	Util. Veh.	Intermediate	85-87
Ford	Aerostar Cargo Van	Van		86-87
	E-150 Club Wagon (1/2-3/4 T)	Van		85-87
	E-150 Econoline (1/2-3/4 T)	Van		85-87
	E-250 Club Wagon (3/4 T)	Van		85-87
	E-250 Econoline (3/4 T)	Van		85-87

Make	Series Name	Vehicle Type	Size Class	Model Years
Ford (continued)				
	Ranger	Pickup	Small	85-87
	Ranger Super Cab	Pickup	Small	86-87
	F-150 (1/2-3/4 T)	Pickup	Standard	85-87
	F-150 Super Cab	Pickup	Standard	85-87
	F-250 (3/4 T)	Pickup	Standard	85-87
	F-250 Super Cab	Pickup	Standard	85-87
	Bronco II	Util. Veh.	Small	85-87
	Bronco	Util. Veh.	Intermediate	85-87
GMC	Rally Wagon (1/2 T)	Van		85-87
	Rally Wagon (3/4 T)	Van		85-87
	Safari Cargo Van	Van		85-87
	Vandura (1/2 T)	Van		85-87
	Vandura (3/4 T)	Van		85-87
	S15	Pickup	Small	85-87
	S15 Extended Cab	Pickup	Small	85-87
	Caballero	Pickup	Standard	85-87
	1500 Series (1/2 T)	Pickup	Standard	85-87
	2500 Series (3/4 T)	Pickup	Standard	85-87
	2500 Series Crew Cab (3/4 T)	Pickup	Standard	85-87
	Jimmy (1/2 T)	Util. Veh.	Intermediate	85-87
	S15 Jimmy	Util. Veh.	Intermediate	85-87
	Suburban (1/2 T)	Util. Veh.	Large	85-87
	Suburban (3/4 T)	Util. Veh.	Large	85-87
Isuzu	Long Bed	Pickup	Small	85-87
	Long Cab	Pickup	Small	86-87
	Standard Bed	Pickup	Small	85-87
	Trooper II	Util. Veh.	Intermediate	85-87
Jeep	Comanche	Pickup	Small	87
	Comanche Long Bed	Pickup	Small	86-87
	Scrambler	Pickup	Small	85
	J10 Long Bed	Pickup	Standard	85-87
	J20 Long Bed	Pickup	Standard	85-87
	CJ-7	Util. Veh.	Small	85-86
	Wrangler	Util. Veh.	Small	87

Make	Series Name	Vehicle Type	Size Class	Model Years
Jeep (continued)				
	Cherokee	Util. Veh.	Intermediate	85-87
	Grand Wagoneer	Util. Veh.	Intermediate	85-87
	Wagoneer	Util. Veh.	Intermediate	85-87
Mazda	Cab Plus	Pickup	Small	86-87
	Long Bed	Pickup	Small	86-87
	Standard Bed	Pickup	Small	86-87
Mitsubishi	Cargo Van	Van		87
	Long Bed	Pickup	Small	87
	Standard Bed	Pickup	Small	85-87
	Montero	Util. Veh.	Small	85-87
Nissan	King Cab	Pickup	Small	85-87
	Long Bed	Pickup	Small	85-87
	Standard Bed	Pickup	Small	85-87
	Pathfinder	Util. Veh.	Intermediate	87
Range Rover	Range Rover	Util. Veh.	Intermediate	87
Subaru	Brat	Pickup	Small	85-87
Suzuki	Jimny	Util. Veh.	Small	85
	Jimny Van	Util. Veh.	Small	85
	Samurai	Util. Veh.	Small	86-87
	Samurai Van	Util. Veh.	Small	86-87
Toyota	Cargo Van	Van		85-87
	Long Bed (1/2 T)	Pickup	Small	85-87
	Standard Bed	Pickup	Small	85-87
	Xtra Cab	Pickup	Small	85-87
	Xtra Cab Long Bed	Pickup	Small	86-87

Make	Series Name	Vehicle Type	Size Class	Model Years
Toyota (continued)				
	4Runner	Pickup	Standard	85-87
	4Runner Wagon	Util. Veh.	Intermediate	85-87
	Land Cruiser	Util. Veh.	Intermediate	85-87
Volkswagen	Vanagon Camper	Van		85-87

APPENDIX B Definitions

Average Loss Payment per Claim — The total of all loss payments made for the claims for a group of vehicles, divided by the number of claims paid.

Average Loss Payment per Insured Vehicle Year — For a group of vehicles, the product of Claim Frequency and Average Loss Payment per Claim, expressed as dollars per insured vehicle year. It should be noted that this definition differs from the commonly used insurance term, pure premium, but yields similar results.

Claim Frequency — The number of claims for a group of vehicles, divided by the exposure for that group.

Collision Coverages — As defined in insurance contracts, the coverage under which people insure their own vehicle against loss caused by collision.

Deductible Amount — That portion of the collision damage cost borne by the policyholder. For computing results, deductible amounts are split into two groups; less than $150 (mainly $50 and $100 deductibles) and greater than or equal to $150 (mainly $200 and $250 deductibles).

Exposure — The time interval an individual vehicle is insured. Exposure for a group of vehicles is expressed in units of insured vehicle years.

Loss Payment — That portion of the collision damage cost borne by the insurer; in general, the total collision damage cost minus the deductible amount.

Operator Age Group — The factor which distinguishes those vehicles whose rated driver is youthful from those vehicles whose rated driver is not youthful (see Youthful Operator).

Rated Driver — The driver who, for insurance purposes, is considered to represent the greatest loss potential for the insured vehicle.

Vehicle Class — There are four vehicle classes, defined as follows:

1. **Passenger Cars** — There are four major body style groupings of passenger cars — regular two-door models, regular four-door models, station wagons and passenger vans, and sports and specialty models. Sports or specialty models include all two-seater cars, all convertibles, all midsize and large cars with two or fewer designated rear seating positions, and all luxury cars. Each body style group is further divided into size class subgroups based on wheelbase (rounded to nearest inch) defined as follows:

   Small — Vehicles with wheelbases less than or equal to 99 inches.

   Midsize — Vehicles with wheelbases greater than 99 inches and less than or equal to 109 inches.

   Large — Vehicles with wheelbases greater than 109 inches.

2. **Vans** — Fully enclosed vehicles with either no hood or a very short hood, in which the engine is placed at least 50 percent behind the windshield. The driver's position is usually well forward, nearly beside the engine, usually within the forward 25 percent of the wheelbase. These vehicles are designed for cargo transport and are equipped with a right side cargo access door and rear door. The cargo area is not separated from the passenger area — both are enclosed under the same roof. Some passenger vans are equipped with additional seats in the cargo area and usually have additional side windows also.

3. **Pickups** — Cargo-carrying vehicles, usually on a truck chassis, with an enclosed cab and a separate open cargo area. The open cargo area generally is a box with raised sides with an opening tailgate. There are also a small number of auto pickups which are similar to regular pickups except that they are built on a passenger car chassis. Pickups are further divided into two subgroups based on curb weight — small pickups (less than 3,200 pounds) and standard pickups (3,200 pounds or more).

4. **Utility Vehicles** — Vehicles built on a heavy-duty chassis capable of off-road use. They are of conventional construction with the driver behind the engine. The cargo and passenger areas are integral with the driver area. Many of these vehicles are equipped with soft or removable tops. Frequently, these vehicles are equipped with four-wheel drive. Utility vehicles are further divided into three subgroups based on wheelbase — small utility vehicles (less than 100 inches), intermediate utility vehicles (from 100 to 120 inches), and large utility vehicles (greater than 120 inches).

Vehicle Identification Number (VIN) — A code, variously comprising both numbers and letters; normally, 8 to 17 characters in length, assigned to each vehicle by its manufacturer. The VIN uniquely identifies the vehicle within at least a ten-year time span and, in recent model year vehicles, contains characteristics of each vehicle.

Vehicle Series — A name denoting a family of vehicles, within a make, with the same wheelbase and a degree of commonality in construction such as body, chassis, etc.

Youthful Operator — For the purposes of this report, all males (married or single) under 25 years of age and all unmarried females under 25 years of aged.

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INSURANCE COLLISION REPORT

Initial Results for 1988 Automobiles

Highway Loss Data Institute

R88-1

Highway Loss Data Institute
Insurance Collision Report

Initial Results for 1988 Automobiles
HLDI R88-1

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SUMMARY

This Highway Loss Data Institute report presents results of the collision coverage loss experience of 1988 model year passenger cars during their first months of availability.

- The 1988 models show large variations in collision loss results among individual vehicle series. Claim frequencies ranged from 6.0 to 16.9 claims per 100 insured vehicle years; average loss payments per claim ranged from about $800 to $3,500; and average loss payments per insured vehicle year were from $66 to $436.
- Even among cars of the same size class and body style, there were large variations in the results for individual vehicle series.
- Collision coverage claim frequencies varied inversely with car size (i.e., collision claim frequencies tended to decrease with increasing car size).
- The overall average loss payment per claim increased four percent for 1988 over 1987 models and the claim frequency increased by one percent, resulting in an increase of approximately $9 in the average loss payment per insured vehicle year.

INTRODUCTION

The Highway Loss Data Institute (HLDI) is a nonprofit, public service organization that gathers, processes, and publishes insurance data concerned with human and economic losses resulting from highway crashes and especially with the ways such losses vary among different kinds of vehicles.

This report summarizes the collision coverage loss results of 1988 model year private passenger cars during their initial period of exposure — June 1987 through February 1988. It is based on collision coverage and loss data supplied by 11 insurers: Allstate, Fireman's Fund, GEICO, Kemper, Liberty Mutual, Nationwide, Prudential, Safeco, State Farm, Travelers, and USAA.

Descriptions of the sources and nature of the data used are presented in Appendix A. The data analysis methods are discussed in Appendix B and definitions are given in Appendix C. A complete list of the vehicle series designations by make and size class appears in Appendix D.

It is intended that the dissemination of this and other HLDI reports will contribute to research into ways for reducing crash damage, crash injuries, and theft losses, and that it will inform the public about differences in the loss experience produced by different kinds of vehicles.

RESULTS AND DISCUSSION

Comparison of Results for Individual Series—1988 Models

Table 1 presents detailed collision coverage loss results for 1988 models during their initial exposure period — June 1987 through February 1988. Aggregated results are presented for all 1988 models combined and for passenger cars grouped by body style and vehicle size. Results are also presented for each individual vehicle series with at least 1,000 insured vehicle years of exposure. Sixty series, out of a total of more than 400 contained in the HLDI data base for 1988 models, had accumulated sufficient exposure to meet the reporting threshold; some 1988 models were introduced in the first half of calendar year 1987 (e.g., Chevrolet Beretta and Corsica, Lincoln Mark VII, and BMW 735). Results for additional vehicle series will be reported subsequently as more exposure is accumulated.

The results presented are exposure (measured in insured vehicle years) and relative values for three quantities that summarize the collision losses: claim frequency per 100 insured vehicle years, average loss payment per claim, and average loss payment per insured vehicle year. The relative results are based on the following overall results for all 1988 models combined: for claim frequency results, 100 is equivalent to 11.1 claims per 100 insured vehicle years; for average loss payment per claim, 100 is equivalent to $1,921; and for average loss payment per insured vehicle year, 100 is equivalent to $213. For example, the relative claim frequency of 123 for the two-door Toyota Tercel indicates a claim frequency that is 23 percent higher than 11.1 (the result for all 1988 models combined). In contrast, the four-door Mercury Tracer's relative claim frequency of 88 is 12 percent lower than the 1988 overall claim frequency. (The overall results are discussed further on page 6 and are presented for comparison in Table 2.)

The results shown in Table 1 were standardized to minimize effects due to differences in the mix of operator age groups and deductible amounts among different vehicles. Both the frequency and average size of collision coverage losses vary with the deductible amount and the age group of the operators. Standardizing these two nonvehicle factors ensures that their mix is the same for each result. It should be noted, however, that other nonvehicle factors could vary among different vehicles and that such factors could affect the results presented in this report. The standardization procedure is described in detail in Appendix B.

The individual series in Table 1 are listed by body style within car size group (small, midsize, large) in ascending order of their relative average loss payments per insured vehicle year. It should be noted that, in general, the greater the exposure associated with a result, the more confidence can be placed in it.

As has been the case with previous HLDI collision reports, there are large variations in loss experience among the individual series. The Chevrolet Astro van's relative average loss payment per insured vehicle year of 31 was the lowest. Three other large passenger vans — Plymouth Grand Voyager (37), Dodge Caravan (40), and Plymouth Voyager (45) — and three large four-door sedans — Chevrolet Caprice (44), Mercury Grand Marquis (44), and Pontiac Bonneville (48) — were the only other 1988 passenger vehicles with average loss payments per insured year less than half the overall combined 1988 result. At the other extreme, the Ford Mustang (205) and the Mazda MX-6 (200) had average loss payments per insured vehicle year that were twice as large as the average for all 1988 models. Four other vehicle series — Toyota Celica (180), Pontiac LeMans two-door (165), Chevrolet Camaro (154), and Pontiac LeMans four-door (151) — had results more than 50 percent higher than average.

The Cadillac DeVille four-door, classified as a specialty car, had the lowest relative claim frequency (54), while the highest relative claim frequency was reported for the Toyota Celica (153). No other cars had a claim frequency 50 percent more than the overall 1988 result.

The Chevrolet Astro van had the lowest relative average loss payment per claim (40). It was the only passenger vehicle with an average loss payment per claim less than half the overall result. The car with the highest relative average loss payment per claim was the Jaguar XJ6 (183). Other cars with relative average loss payments per claim at least 50 percent greater than the overall result were the Mazda MX-6 (166) and Ford Mustang (156).

Passenger vehicles with substantially better than average results in both claim frequency and average loss payment per claim included the Plymouth Grand Voyager (63 and 59, respectively), Dodge Caravan (66, 60), and four-door models of the Chevrolet Caprice (67, 65) and Mercury Grand Marquis (64, 69). All four of these large passenger vehicles had

(Continued on page 6)

Table 1
Collision Coverage Insurance Losses
1988 Passenger Car Models

Make	Series	Total Exposure (Insured Vehicle Years)	Relative Claim Frequency	Relative Average Loss Payment Per Claim	Relative Average Loss Payment Per Insured Vehicle Year
All	**All**	**231892**	**100 = 11.1**	**100 = $1,921**	**100 = $213**
		Small Cars			
Two-Door Models		**36862**	**125**	**106**	**132**
Toyota	Tercel	2952	123	82	100
Honda	Civic	1887	108	103	111
Ford	Festiva	3857	104	114	118
Nissan	Sentra	2971	129	91	118
Ford	Escort	3842	131	98	128
Mercury	Tracer	2586	109	118	129
Hyundai	Excel	3509	139	96	134
Mazda	323	1183	114	119	135
Pontiac	LeMans	2222	146	113	165
Toyota	Celica	1524	153	118	180
Mazda	MX-6	1452	121	166	200
Four-Door Models		**24073**	**107**	**97**	**104**
Ford	Escort	1484	110	73	81
Mercury	Tracer	1665	88	96	84
Mazda	323	2062	91	102	93
Honda	Civic	2258	132	75	99
Toyota	Corolla	2718	102	110	112
Hyundai	Excel	5263	118	102	121
Pontiac	LeMans	2147	129	117	151
Station Wagons/Passenger Vans		**2462**	**92**	**84**	**77**
Sports & Specialty		**3440**	**124**	**139**	**173**
		Midsize Cars			
Two-Door Models		**39926**	**111**	**103**	**115**
Mercury	Cougar	1763	108	89	96

(See notes on page 6.)

Table 1 (Cont'd)
Collision Coverage Insurance Losses
1988 Passenger Car Models

Make	Series	Total Exposure (Insured Vehicle Years)	Relative Claim Frequency	Relative Average Loss Payment Per Claim	Relative Average Loss Payment Per Insured Vehicle Year
		Midsize Cars (Cont'd)			
Pontiac	Grand Am	2768	97	100	97
Buick	Regal	1212	103	101	104
Honda	Prelude	4235	113	96	108
Oldsmobile	Calais	1031	101	108	108
Honda	Accord	1303	123	99	121
Chevrolet	Beretta	19319	118	104	123
Ford	Thunderbird	1894	113	121	136
Chevrolet	Cavalier	1907	113	125	141
Four-Door Models		**55078**	**93**	**89**	**83**
Chevrolet	Celebrity	2031	68	79	53
Ford	Taurus	2644	81	76	61
Oldsmobile	Cutlass Ciera	1937	72	89	64
Toyota	Camry	5526	77	91	70
Dodge	Aries	1248	75	96	72
Plymouth	Reliant	1673	82	91	74
Mazda	626	2086	80	115	92
Chevrolet	Corsica	15427	110	85	94
Ford	Tempo	1424	87	110	96
Honda	Accord	8624	108	90	97
Renault	Medallion	1963	129	97	126
Station Wagons/Passenger Vans		**5517**	**81**	**82**	**66**
Ford	Taurus	1228	75	93	70
Sports & Specialty		**17198**	**109**	**138**	**150**
Lincoln	Mark VII	3254	83	113	93
Chevrolet	Camaro	1364	128	120	154
Ford	Mustang	4175	132	156	205
		Large Cars			
Two-Door Models		**309**	*	*	*

*Aggregated results are not reported for large two-door models due to insufficient exposure.

(See notes on page 5.)

Table 1 (Cont'd)
Collision Coverage Insurance Losses
1988 Passenger Car Models

Make	Series	Total Exposure (Insured Vehicle Years)	Relative Claim Frequency	Relative Average Loss Payment Per Claim	Relative Average Loss Payment Per Insured Vehicle Year
		Large Cars (Cont'd)			
Four-Door Models		**14518**	**71**	**89**	**63**
Chevrolet	Caprice	1102	67	65	44
Mercury	Grand Marquis	2597	64	69	44
Pontiac	Bonneville	1222	57	84	48
Oldsmobile	Ninety-Eight	1242	55	95	53
Buick	LeSabre	1758	76	90	68
Ford	Crown Victoria	2126	80	88	71
Buick	Electra	1191	79	97	77
Oldsmobile	Delta 88	2275	78	101	78
Station Wagons/Passenger Vans		**16536**	**73**	**64**	**46**
Chevrolet	Astro Van	1943	78	40	31
Plymouth	Grand Voyager	2296	63	59	37
Dodge	Caravan	2719	66	60	40
Plymouth	Voyager	2703	75	61	45
Dodge	Grand Caravan	2371	76	70	53
Ford	Aerostar	3375	78	84	65
Sports & Specialty		**15974**	**76**	**103**	**78**
Cadillac	DeVille 4D	1184	54	104	57
Lincoln	Town Car	10467	77	94	73
Jaguar	XJ6	1348	72	183	130
BMW	735i	1127	89	149	133

Notes for Table 1:

Results are standardized to the distribution:

Deductible	Youthful Operator	No Youthful Operator
<$150	5%	50%
≥$150	5%	40%

Series are ranked within group and subgroup by ascending average loss payment per insured vehicle year. Series with less than 1,000 insured vehicle years of exposure are not summarized.

(Continued from page 2)

results at least 30 percent less than the average in both collision loss categories. At the other end of the scale, results for the Ford Mustang (132, 156), Mazda MX-6 (121, 166), and Chevrolet Camaro (128, 120) were at least 20 percent above the overall result for both claim frequency and average loss payment per claim.

As pointed out in previous collision coverage reports, even among cars of the same size and body style, there can be large variations in the collision coverage loss results for individual vehicle series. For example, among midsize four-door models, the relative results for claim frequency ranged from 68 to 129, for average loss payment per claim from 76 to 115, and for average loss payment per insured vehicle year from 53 to 126.

1988 Model Results By Car Size

Table 1 also provides aggregated results for passenger cars grouped by vehicle size and body style. (No results are provided for large two-door vehicles because of insufficient exposure.) The aggregated results indicate that collision claim frequencies (as well as, average loss payments per insured vehicle year) decrease with increasing car size. For example, the relative values of claim frequency for all *four-door* 1988 passenger vehicles are as follows: small (107), midsize (93), and large (71). This inverse relationship of collision claim frequencies and vehicle size is also apparent for the other body style groups, but it is less pronounced for average collision loss payments per claim.

Comparison of 1987 and 1988 Model Year Overall Results

Table 2 compares the overall claim frequency, average loss payment per claim, and average loss payment per insured vehicle year for 1988 models during their initial exposure period with those of 1987 models during the same calendar period and for the corresponding period one year earlier. Because the comparisons of the initial results for 1988 models and those for 1987 models are for calendar periods that are one year apart, they could be influenced by differences not only between model years but also calendar periods. In comparisons based on the results from the same calendar period, the 1987 vehicles would be an average of one year older than the 1988 vehicles, and the comparisons could be influenced by the differences in the vehicle ages. For these reasons, two sets of results for 1987 models are presented in Table 2 for comparisons with the 1988 model year results. The initial 1987 results are based on the exposure period one year earlier than that of the second set of 1987 model results, which are based on the same exposure period as the 1988 model year results. The June 1987 through February 1988 results for 1987 models were separately adjusted to ensure that the contribution of exposure from each month was comparable to that for the 1988 models. The monthly adjustment procedure is described in detail in Appendix B.

The overall results for 1987 and 1988 models during June 1987 through February 1988 show that for 1988 models the frequency of collision claims increased by one percent, the average loss payment per claim increased by four percent, and the average loss payment per insured vehicle year increased by four percent.

TABLE 2 Overall Collision Coverage Loss Experience of 1988 Models Compared to 1987 Models

Loss Category	1987 Models		1988 Models	Percentage Change
	June 1986-Feb. 1987*	June 1987-Feb. 1988**	June 1987-Feb. 1988	June 1987-Feb. 1988
Claim Frequency Per 100 Insured Vehicle Years	10.4	11.0	11.1	+1
Average Loss Payment Per Claim	$1,827	$1,855	$1,921	+4
Average Loss Payment Per Insured Vehicle Year	$191	$204	$213	+4

*Comparisons to 1988 models may be influenced by model year and calendar period differences.
**Comparisons to 1988 models may be influenced by model year and vehicle age differences.

APPENDIX A
Sources and Nature of Data

Both policy and claim-related collision coverage data for 1988 model year vehicles in the calendar period June 1987 through February 1988 were used in the preparation of this report. "Assigned risk," fleet policies, and all data from Massachusetts were excluded. Only payments for damage to insured automobiles were included; monies recovered from the salvage of wrecked vehicles were excluded, as were monies subsequently recovered by the companies through subrogation actions. Data for June 1987 through February 1988 were collected from the following companies: Allstate, Fireman's Fund, GEICO, Kemper, Liberty Mutual, Nationwide, Prudential, Safeco, State Farm, Travelers, and USAA.

Insurance Policy Data

Insurance policy data, as distinct from claim data, describe the characteristics of an insured vehicle, including its make and series and the nature of its collision coverage. Policy data used in this report included the following basic information:

- Vehicle Identification Number (VIN)*
- Deductible Amount*
- Rated Driver Characteristics*
- Date and Nature of Relevant Changes in Coverage

Insurance Claim Data

Insurance claim data report the characteristics of an insured vehicle for which a collision coverage claim is made, the initiation of the claim, and/or the corresponding payment. Claim data used in the report included the following basic information:

- Vehicle Identification Number (VIN)
- Crash Date
- Loss Payment Amount

The dollar amounts reported represented loss payments made to or on behalf of the policyholder for damage to the insured vehicle.

APPENDIX B
Method of Data Analysis

Vehicle Description and Identification

The Vehicle Identification Numbers (VINs) of most new automobiles sold in the United States are individually unique numbers that contain, in coded form, detailed information as to each vehicle's make, series, and other distinguishing characteristics.

The specific vehicle types for which results are presented in this report were derived from the VINs of the individual automobiles.

*See Appendix C for definitions.

Only data with valid VINs were used for this report. Each VIN was decoded into a set of specific vehicle characteristics. For the purposes of this report the vehicle characteristics of primary concern were make, series, and vehicle size class (Appendix D). The use of VINs also permits analyses of other very specific vehicle characteristics such as horsepower, body style, etc.

Exposure

Exposure, in insured vehicle years, was computed for each individual vehicle from the coverage data. The total number of insured vehicle years for each vehicle series was then obtained by accumulating the exposure for all of the individual vehicles of that vehicle series.

The exposure for each vehicle series was obtained for the four combinations of deductible amount and operator age group, a, b, c, d, shown below:

Deductible	Youthful Operator	No Youthful Operator
$< \$150$	a	b
$\geq \$150$	c	d

Claim Frequency

Both pending and paid claims for an individual vehicle were first matched with its corresponding coverage data to ensure that the crash had occurred within an appropriate period of collision coverage for that vehicle. In every instance in which multiple claims were made for the same crash, they were treated as a single claim in the calculations of claim frequency. Claims that were settled without payment, as well as those paid even though the damage was less than the deductible amount, were excluded from the computations. All remaining claims for each vehicle series were used, together with the corresponding exposure, to compute the claim frequency: the number of claims per 100 insured vehicle years.

For each vehicle series, claim frequencies were computed for each of the four combinations of deductible and operator age group, a, b, c, d, shown in the diagram.

Average Loss Payment Per Claim

Paid claims for each vehicle series were used to compute its average loss payment per claim. They were summed and divided by the number of claims to produce the average loss payment per claim. Claims that were settled without payment, as well as those paid even though the damage was less than the deductible amount, were excluded from the computations. In every instance in which multiple claims and/or multiple payments were made for the same crash, they were treated as a single claim and/or single payment in the calculation of average loss payment.

Average loss payments per claim were also obtained for each combination of deductible amount and operator age group.

Average Loss Payment Per Insured Vehicle Year

The average loss payment per insured vehicle year for each vehicle series was obtained by multiplying the claim frequen-

cy per 100 insured vehicle years by the average loss payment per claim, and dividing the result by 100.

Average loss payments per insured vehicle year were also obtained for each combination of deductible amount and operator age group.

Standardization

It is well known that loss experience can vary substantially in relation to certain nonvehicle factors. Two important such factors are the deductible amount of the coverage and the operator age group; both claim frequency and average loss payment vary with these factors. In the case of the operator age group, youthful operators generally generate higher insurance losses than older drivers. Thus, if compared vehicles have different proportions of youthful operators, this difference, if not taken into consideration, would be sufficient to bias the comparison. Results obtained from the two deductible categories, less than $150 and greater than or equal to $150, also vary. For example, average loss payments for the higher deductibles are greater than those for the lower deductibles. Again, if compared vehicles have different proportions of lower deductible coverages, this difference, if not taken into consideration, would also be sufficient to bias the comparison.

In order to reduce any biases in the comparison of results that could arise because of differences attributable to variations among different vehicles in deductible amount and operator age groups, results were first adjusted or standardized so as to equalize the effects of the two nonvehicle factors in the standardized results. In this procedure, a weighted average of the actual results for each combination of deductible amount and operator age group was computed using the standardization weights shown in the table. Because the same weights were always used, the effects due to the nonvehicle factors were present in equal amounts in the standardized results. Therefore, to the extent that the age distributions within each operator age group and the deductible distributions within each deductible group do not vary substantially for different vehicles, these effects can no longer bias comparisons of results.

The standardization procedure employed is widely used in health statistics.* The basic principle of the method is the introduction of a selected population with a standard distribution across the combinations of deductible amount and operator age group as represented by the standardization weights in the table.

*For example, see Armitage, P. *Statistical Methods in Medical Research*, Wiley, New York (1971)

STANDARDIZATION WEIGHTS

Deductible Amount	Operator Age Group: Youthful Operator	No Youthful Operator	Combined
< $150	0.05	0.50	0.55
≥ $150	0.05	0.40	0.45
Combined	0.10	0.90	1.00

Mathematical Description of Standardization Procedure

The standardization procedure can be represented mathematically as follows:

Deductible Amount	Operator Age Group: Youthful Operator	No Youthful Operator	Combined
< $150	X_{11}	X_{12}	$X_{1.}$
≥ $150	X_{21}	X_{22}	$X_{2.}$
Combined	$X_{.1}$	$X_{.2}$	$X_{..}$

where,

X_{ij} represents a computed claim frequency for a particular vehicle series with respect to the deductible amount i and age group j,

and

i = 1 for deductibles < $150 and 2 for deductibles ≥ $150,

j = 1 for youthful operator group and 2 for no youthful operator group,

$X_{.j}$ represents the computed claim frequency for all deductibles combined for age group j,

$X_{i.}$ represents the computed claim frequency for both operator age groups combined for deductible amount group i, and,

$X_{..}$ represents the computed claim frequency for all deductibles and both age groups combined.

Now, if weights are defined as follows:

Deductible Amount	Operator Age Group: Youthful Operator	No Youthful Operator	Combined
< $150	W_{11}	W_{12}	$W_{11} + W_{12}$
≥ $150	W_{21}	W_{22}	$W_{21} + W_{22}$
Combined	$W_{11} + W_{21}$	$W_{12} + W_{22}$	1

where $W_{11} + W_{21} + W_{12} + W_{22} = 1$,

then the standardized claim frequency for the particular vehicle series is:

$$W_{11}X_{11} + W_{21}X_{21} + W_{12}X_{12} + W_{22}X_{22}$$

and, if A_{ij} represents the computed average loss payment per claim for a particular vehicle series, then the standardized average loss payment per claim is:

$$\frac{W_{11}X_{11}A_{11} + W_{21}X_{21}A_{21} + W_{12}X_{12}A_{12} + W_{22}X_{22}A_{22}}{W_{11}X_{11} + W_{21}X_{21} + W_{12}X_{12} + W_{22}X_{22}}$$

The standardized average loss payment per insured vehicle year is obtained by multiplying the standardized claim frequency by the standardized average loss payment and dividing by 100.

Similarly, it is possible to standardize within a deductible category or within an operator age group by using the appropriate combined weights. The standardized claim frequency for youthful operators, for example, would be:

$$(W_{11} + W_{12})X_{11} + (W_{21} + W_{22})X_{21},$$

and the standardized claim frequency for deductibles greater than or equal to $150 would be:

$$(W_{11} + W_{21})X_{21} + (W_{12} + W_{22})X_{22}.$$

These latter standardizations, using the combined weights, enable valid comparisons to be made between the results for different deductible groups or between the results for different operator age groups without the effects of the other factor biasing the comparisons.

Example

For the 1988 Ford Escort two-door, the four claim frequencies were:

$X_{11} = 27.7$ $X_{12} = 12.6$ $X_{21} = 21.2$ $X_{22} = 14.4$

and the weights were:

$W_{11} = 0.05$ $W_{12} = 0.50$ $W_{21} = 0.05$ $W_{22} = 0.40$

The standardized claim frequency was:

$(0.05)(27.7) + (0.50)(12.6) + (0.05)(21.2) + (0.40)(14.4) = 14.5.$

Monthly Exposure Adjustment

To compare the results from new model year cars during their initial period of availability with the corresponding results from the previous model year's cars, it is necessary to adjust the latter results because of differences in the mix of exposure by month which contribute to that result. For 1988 models, exposure in each successive month increases as more of the new model cars are sold, and therefore there is more exposure from the later months than from the earlier months. For this same time period, nearly all of the 1987 cars are on the road so that exposure in each month is essentially the same.

The effects of this difference in exposure can be removed by standardizing the monthly proportions of exposure in the results for the two model years. In the adjustment employed, results for the 1987 models were adjusted to have the monthly mix of exposure corresponding to the 1988 models, as shown in the following table.

MONTHLY ADJUSTMENT WEIGHTS

June	July	Aug.	Sept.
0.01	0.02	0.02	0.03

Oct.	Nov.	Dec.	Jan.	Feb.
0.07	0.11	0.18	0.25	0.31

Analogous to the earlier discussion of the standardization procedure for age and deductible amount, let

X_m represent a computed claim frequency adjusted for deductible amount and age in month m for a particular 1987 vehicle series, and

W_m represent the monthly adjustment weights cited in the preceding table.

Thus, the standardized claim frequency adjusted for monthly exposure is:

$$\sum W_m X_m.$$

Similarly, if A_m represents the computed average loss payment per claim adjusted for deductible amount and age in month m for a particular 1987 vehicle series, then the standardized average loss payment per claim is:

$$\frac{\sum W_m X_m A_m}{\sum W_m X_m}$$

Thus, using these weights, weighted averages of standardized monthly claim frequency and average loss payment per claim results were computed for 1987 model year cars. Recall that the standardized average loss payment per insured vehicle year is then obtained by multiplying the standardized claim frequency by the standardized average loss payment per claim and dividing by 100. The results thus obtained are both standardized for age and deductible and adjusted for monthly exposure differences.

An assumption made in computing a standardized and adjusted result is that exposure in each month is independent of the factors deductible amount and operator age group. This assumption is valid because the distributions of exposure by deductible amount and operator age group are approximately the same for each month.

APPENDIX C Definitions

Average Loss Payment Per Claim — The total of all loss payments made for the claims for a group of vehicles, divided by the number of claims paid.

Average Loss Payment Per Insured Vehicle Year — For a group of vehicles, the product of Claim Frequency and Average Loss Payment per Claim, expressed as dollars per insured vehicle year. It should be noted that this definition differs from the commonly used insurance term, pure premium, but yields similar results.

Claim Frequency — The number of claims for a group of vehicles, divided by the exposure for that group.

Collision Coverages — As defined in insurance contracts, the coverage under which people insure their own vehicle against loss caused by collision.

Deductible Amount — That portion of the collision damage cost borne by the policyholder. For computing results, deductible amounts are split into two groups; less than $150 (mainly $50 and $100 deductibles) and greater than or equal to $150 (mainly $200 and $250 deductibles).

Exposure — The time interval an individual vehicle is insured. Exposure for a group of vehicles is expressed in units of insured vehicle years.

Loss Payment — That portion of the collision damage cost borne by the insurer; in general, the total collision damage cost minus the deductible amount.

Operator Age Group — The factor which distinguishes those vehicles whose rated driver is youthful from those vehicles whose rated driver is not youthful (see Youthful Operator).

Rated Driver — The driver who, for insurance purposes, is considered to represent the greatest loss potential for the insured vehicle.

Vehicle Identification Number (VIN) — A code, variously comprising both numbers and letters; normally, 8 to 17 characters in length, assigned to each vehicle by its manufacturer. The VIN uniquely identifies the vehicle within at least a ten-year time span and, in recent model year vehicles, contains coding which identifies the make, series, model year, and other characteristics of each vehicle

Vehicle Classifications — There are four major body style groupings of passenger cars — regular two-door models, regular four-door models, station wagons, and sports and specialty models. Sports and specialty models include all two-seater cars, all convertibles, all midsize and large cars with two or fewer designated rear seating positions, and all luxury cars. Body styles are divided into size classes based on wheelbase (rounded to the nearest inch) defined as follows:

Small — Vehicles with wheelbases less than or equal to 99 inches.

Midsize — Vehicles with wheelbases greater than 99 inches and less than or equal to 109 inches.

Large — Vehicles with wheelbases greater than 109 inches.

Vehicle Series — A name denoting a family of vehicles, within a make, with the same wheelbase and a degree of commonality in construction such as body, chassis, etc.

Youthful Operator — For the purposes of this report, all males (married or single) under 25 years of age and all unmarried females under 25 years of age.

APPENDIX D 1988 Vehicle Series Designations

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Acura	Small	Integra	2 DR	96.5	RS, LS, LS Special
		Integra	4 DR	99.2	RS, LS
	Midsize	Legend 2 DR	SP	106.5	LS, Sunroof, L
		Legend 4 DR	SP	108.7	LS, Sunroof, L
Alfa Romeo	Small	Milano	4 DR	98.8	Green, Platinum, Gold
		Spider Conv.	SP	88.6	Veloce, Graduate, Quadrifoglio
American	Midsize	Eagle	SW	109.3	
Aston Martin	Midsize	Saloon	SP	102.8	
		Vantage	SP	102.8	
		Volante Conv.	SP	102.8	
	Large	Lagonda	SP	115.0	
Audi	Midsize	5000 4 DR	SP	105.8	S, CS
		5000 SW	SP	105.8	S
		5000 Quattro 4 DR	SP	105.8	S, CS
		5000 Quattro SW	SP	105.8	CS
		80	4 DR	100.2	
		80 Quattro 4 DR	SP	99.9	
		90 4 DR	SP	100.2	
		90 Quattro 4 DR	SP	99.9	
Austin Rover	Midsize	Sterling 825	SP	108.6	S, SL
Avanti	Midsize	Avanti Conv.	SP	109.0	
		Avanti	SP	109.0	
Bentley	Large	Continental Conv.	SP	120.5	
		Eight	SP	120.5	
		Mulsanne	SP	120.5	

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
BMW	Midsize	M3 2 DR	SP	101.0	
		M5 4 DR	SP	103.3	
		M6	SP	103.3	
		325 2 DR	SP	101.2	
		325 4 DR	SP	101.2	
		325i Conv.	SP	101.2	
		325i 4 DR	SP	101.2	
		325is 2 DR	SP	101.2	
		325iX 4WD 2 DR	SP	101.2	
		325iX 4WD 4 DR	SP	101.2	
		528e	SP	103.3	
		535i/535is	SP	103.3	
		635CSi	SP	103.3	
	Large	735i	SP	111.5	
		750iL 4 DR	SP	116.0	
Buick	Small	Reatta	SP	98.5	
	Midsize	Century	2 DR	104.9	Custom, Limited
		Century	4 DR	104.9	Custom, Limited
		Century	SW	104.9	Custom, Estate
		Regal FWD	2 DR	107.5	Custom, Limited
		Riviera	SP	108.0	Luxury
		Skyhawk	2 DR	101.2	Sport
		Skyhawk	4 DR	101.2	Sport
		Skyhawk	SW	101.2	Sport
		Skylark	2 DR	103.4	Custom, Limited
		Skylark	4 DR	103.4	Custom, Limited
	Large	Electra FWD	4 DR	110.8	Park Avenue, T-Type, Limited
		Electra RWD	SW	116.0	Estate
		LeSabre	2 DR	110.8	Custom, Limited
		LeSabre	4 DR	110.8	Custom, Limited
		LeSabre	SW	116.0	Estate
Cadillac	Small	Allante Conv.	SP	99.4	
	Midsize	Cimarron	4 DR	101.2	
		Eldorado	SP	108.0	
		Seville	SP	108.0	
	Large	Brougham 4 DR	SP	121.5	
		DeVille 2 DR FWD	SP	110.8	
		DeVille 4 DR FWD	SP	110.8	
		Fltwd D'Elegance	SP	110.8	
		Fltwd 60 Special	SP	115.8	Sixty Special

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Chevrolet	Small	Corvette	SP	96.2	
		Corvette Conv.	SP	96.2	
		Nova	4 DR	95.7	
		Spectrum	2 DR	94.5	
		Spectrum	4 DR	94.5	
		Sprint	2 DR	88.4	ER
		Sprint	4 DR	92.3	
	Midsize	Beretta	2 DR	103.4	
		Camaro	SP	101.0	
		Camaro Conv.	SP	101.0	
		Cavalier	2 DR	101.2	CS, RS, Z24
		Cavalier	4 DR	101.2	CS, RS
		Cavalier	SW	101.2	CS, RS
		Cavalier Conv.	SP	101.2	RS, Z24
		Celebrity	2 DR	104.9	
		Celebrity	4 DR	104.9	
		Celebrity	SW	104.9	
		Corsica	4 DR	103.4	
		Monte Carlo	2 DR	108.1	
	Large	Astro Van	PV	111.0	
		Caprice	2 DR	116.0	Classic
		Caprice	4 DR	116.0	Classic, Brougham
		Caprice	SW	116.0	Classic
Chrysler	Small	Daytona	2 DR	97.0	Pacifica, Shelby Z
	Midsize	Dynasty	4 DR	104.3	LE
		LeBaron	2 DR	100.3	
		LeBaron	4 DR	100.3	
		LeBaron	SW	100.3	Town & Country
		LeBaron Conv.	SP	100.3	
		LeBaron GTS	4 DR	103.1	
		New Yorker (C Body)	4 DR	104.3	Landau
		New Yorker (E Body)	4 DR	103.3	
	Large	New Yorker 5th Ave.	4 DR	112.7	5th Avenue Edition
		Newport	4 DR	112.7	
Chrysler/ Plymouth/ Mitsubishi	Small	Colt	2 DR	93.7	E, DL, DL Turbo
		Colt	4 DR	93.7	E, DL, Premier
		Colt	SW	93.7	DL
		Conquest	2 DR	95.9	
	Midsize	Colt Vista	SW	103.3	Vista
		Colt Vista 4WD	SW	103.5	Vista

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Daihatsu	Small	Charade	2 DR	92.1	CLS, CLX, CSX
Dodge	Small	Daytona	2 DR	97.0	Pacifica, Shelby Z
		Omni	4 DR	99.1	
		Shadow	2 DR	97.0	Shelby
		Shadow	4 DR	97.0	
	Midsize	Aries	2 DR	100.3	LE
		Aries	4 DR	100.3	LE
		Aries	SW	100.4	LE
		Dynasty	4 DR	104.3	LE
		Lancer	4 DR	103.1	ES
		600	4 DR	103.3	SE
	Large	Caravan	PV	112.0	SE, LE
		Diplomat	4 DR	112.7	SE, Salon
		Grand Caravan	PV	119.0	SE, LE
Dodge/ Mitsubishi	Small	Colt	2 DR	93.7	E, DL, DL Turbo
		Colt	4 DR	93.7	E, DL, Premier
		Colt	SW	93.7	DL
	Midsize	Colt Vista	SW	103.3	Vista
		Colt Vista 4WD	SW	103.5	Vista
Ferrari	Small	328 Conv.	SP	92.1	
		328 GTB	SP	92.1	
		328 GTS	SP	92.1	
	Midsize	Mondial Conv.	SP	104.3	Cabriolet
		Mondial	SP	104.3	
		Testarossa	SP	100.4	
Fiat	Small	X 1/9	SP	86.7	
Ford	Small	Escort*	2 DR	94.2	GT, GL, Pony
		Escort*	4 DR	94.2	GL, GLX
		Escort*	SW	94.2	GL, GLX
		Escort EXP*	SP	94.2	Escort EXP Sport, Escort EXP Luxury
		Festiva	2 DR	90.2	L, LX
	Midsize	Mustang	SP	100.5	GT, LX
		Mustang Conv.	SP	100.5	GT, LX
		Taurus	4 DR	106.0	L, GL, LX, MT-5

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Ford (cont'd)		Taurus	SW	106.0	L, GL, LX, MT-5
		Tempo	2 DR	99.9	L, GL, LX, GLS
		Tempo	4 DR	99.9	L, GL, GLS
		Tempo 4WD	2 DR	99.9	
		Tempo 4WD	4 DR	99.9	
		Thunderbird	2 DR	104.2	LX, Sport, Turbo
	Large	Aerostar	PV	118.9	Window Wagon
		Crown Victoria	4 DR	114.3	S, LX
		Crown Victoria	SW	114.3	Country Squire, S, LX
GMC	Large	Safari Van	PV	111.0	
Honda	Small	Civic	2 DR	98.4	DX
		Civic	4 DR	98.4	DX, LX
		Civic	SW	98.4	Wagovan
		Civic 4WD	SW	98.4	
		Civic CRX	SP	90.6	CRX HF, CRX, CRX Si
	Midsize	Accord	2 DR	102.4	DX, LXi
		Accord	4 DR	102.4	LX, LXi
		Prelude	2 DR	101.0	Si, S
Hyundai	Small	Excel	2 DR	93.7	GL, GLS
		Excel	4 DR	93.7	GL, GLS
Isuzu	Small	I-Mark	2 DR	94.5	
		I-Mark	4 DR	94.5	
		Impulse	2 DR	96.1	
Jaguar	Midsize	XJ-S	SP	102.0	
		XJ-SC	SP	102.0	
	Large	XJ-6	SP	113.0	VDP
Lincoln	Midsize	Continental	SP	109.0	Signature
		Mark VII	SP	108.5	LSC, Blass
	Large	Town Car	SP	117.3	Cartier, Signature

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Lotus	Small	Esprit Turbo	SP	97.8	
Maserati	Small	Biturbo	SP	98.9	
		Spyder Conv.	SP	94.4	
	Midsize	425 4 DR	SP	102.4	
Mazda	Small	MX-6	2 DR	99.0	Turbo
		RX-7	SP	95.7	Turbo
		RX-7 Conv.	SP	95.7	
		323	2 DR	94.5	Turbo
		323 4WD	2 DR	94.5	Turbo
		323	4 DR	94.5	Turbo
		323	SW	94.5	
	Midsize	626	4 DR	101.4	Turbo
		929	4 DR	106.7	
Mercedes Benz	Small	560SL Conv.	SP	96.7	Roadster
	Midsize	190D	SP	104.9	2.5L
		190E	SP	104.9	2.3L, 2.6L
		300CE	SP	106.9	
	Large	260E	SP	110.2	
		300E	SP	110.2	
		300SE	SP	115.6	
		300SEL	SP	121.1	
		300TE	SP	110.2	
		420SEL	SP	121.1	
		560SEC	SP	112.2	
		560SEL	SP	121.1	
Mercury	Small	Tracer	2 DR	94.7	L, GS, LS
		Tracer	4 DR	94.7	GS, LS
		Tracer	SW	94.7	LS
	Midsize	Cougar	2 DR	104.0	XR-7, LS
		Sable	4 DR	106.0	L, GS, LS
		Sable	SW	106.0	L, GS, LS
		Topaz	2 DR	99.9	GS, XR5
		Topaz	4 DR	99.9	GS, LS, LTS
	Large	Grand Marquis	4 DR	114.3	GS, LS
		Grand Marquis	SW	114.3	Colony Park, Colony Park LS

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Merkur	Midsize	Scorpio	SP	108.7	
		XR4Ti	2 DR	102.7	
Mitsubishi	Small	Cordia	2 DR	96.3	High/Prem (L/LS), Special
		Mirage	2 DR	93.7	Medium, High/Prem (L/LS), Special
		Mirage	4 DR	93.7	High/Prem (L/LS)
		Starion	2 DR	95.9	High/Prem (L/LS), Special
		Tredia	4 DR	96.3	High/Prem (L/LS), Special
		Wagon	PV	88.0	
	Midsize	Sigma	4 DR	102.4	High/Prem (L/LS)
Nissan	Small	Pulsar	2 DR	95.7	XE, SE
		Sentra	2 DR	95.7	
		Sentra	4 DR	95.7	
		Sentra	SW	95.7	
		Sentra 4WD	SW	95.7	XE
		Stanza	SW	99.0	
		Stanza 4WD	SW	99.0	
		Van	PV	92.5	
		200SX	2 DR	95.5	
		300ZX	SP	91.3	
		300ZX 2+2	SP	99.2	
	Midsize	Maxima	4 DR	100.4	
		Maxima	SW	100.4	GXE
		Stanza	4 DR	100.4	
Oldsmobile	Midsize	Calais	2 DR	103.4	Supreme, International
		Calais	4 DR	103.4	Supreme, International
		Cutlass	2 DR	108.1	Cutlass Supreme, Supreme Brougham
		Cutlass FWD	2 DR	107.5	Cutlass Supreme, Brougham, Sport
		Cutlass Ciera	2 DR	104.9	LS, Brougham, International

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Oldsmobile (cont'd)		Cutlass Ciera	4 DR	104.9	LS, Ciera Brougham, International
		Cutlass Ciera	SW	104.9	Cruiser, SL, International
		Firenza	2 DR	101.2	S
		Firenza	4 DR	101.2	
		Firenza	SW	101.2	
		Toronado	SP	108.0	Brougham, Trofeo
	Large	Custom Cruiser	SW	116.0	
		Delta 88	2 DR	110.8	Royale, Royale Brougham
		Delta 88	4 DR	110.8	Royale, Royale Brougham
		Ninety Eight FWD	4 DR	110.8	Regency, Regency Brougham, Touring
Peugeot	Midsize	505	4 DR	108.0	
	Large	505	SW	114.2	
Plymouth	Small	Horizon	4 DR	99.1	
		Sundance	2 DR	97.0	
		Sundance	4 DR	97.0	
	Midsize	Caravelle	4 DR	103.3	Special Edition
		Reliant	2 DR	100.3	LE
		Reliant	4 DR	100.3	LE
		Reliant	SW	100.4	LE
	Large	Gran Fury	4 DR	112.7	Salon
		Voyager	PV	112.0	SE, LE
		Grand Voyager	PV	119.0	SE, LE
Pontiac	Small	Fiero	SP	93.4	SE, Sport, GT
		Firefly	2 DR	88.4	
		LeMans	2 DR	99.2	
		LeMans	4 DR	99.2	SE, GSE
	Midsize	Firebird	SP	101.0	Trans/Am
		Firebird Conv.	SP	101.0	Trans/Am
		Grand Am	2 DR	103.4	Le, SE
		Grand Am	4 DR	103.4	LE, SE

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Pontiac (cont'd)		Grand Prix	2 DR	107.6	LE, SE
		Sunbird	2 DR	101.2	SE, GT
		Sunbird	4 DR	101.2	SE, GT
		Sunbird	SW	101.2	SE
		Sunbird Conv.	SP	101.2	SE, GT
		6000	2 DR	104.9	
		6000	4 DR	104.9	LE, SE, STE
		6000	SW	104.9	LE, SE
	Large	Bonneville	4 DR	110.8	LE, SE, SSE
		Parisienne	SW	116.0	Safari
Porsche	Small	911 Coupe	SP	89.5	Turbo
		911 Targa/Cabriolet	SP	89.5	Turbo
		924 Coupe	SP	94.5	S
		928 Coupe	SP	98.4	S
		944 Coupe	SP	94.5	Turbo, S
Renault/ Eagle	Midsize	Medallion	4 DR	102.4	DL, LX
		Medallion	SW	108.3	DL, LX
		Premier	4 DR	105.5	DL, LX, ES
Rolls Royce	Large	Corniche Conv.	SP	120.5	
		Silver Spirit	SP	120.5	
		Silver Spur	SP	124.0	
SAAB	Small	900	2 DR	99.1	S, Turbo
		900	4 DR	99.1	S
		900 Conv.	SP	99.1	Turbo
	Midsize	9000	SP	105.2	S, Turbo
Subaru	Small	DL/GL	2 DR	97.2	DL, GL
		DL/GL	4 DR	97.2	DL, GL, GL-10, GL-10 Turbo
		DL/GL	SW	97.0	DL, GL, GL-10, GL-10 Turbo
		DL/GL 4WD	SW	96.9	DL, GL, GL Turbo GL-10 Turbo
		GL 4WD	2 DR	97.2	GL, RX Turbo
		GL 4WD	4 DR	97.0	GL, GL-10 Turbo, RX Turbo

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Subaru (cont'd)		Hatchback	2 DR	93.7	GL
		Hatchback 4WD	2 DR	93.3	GL
		Justy	2 DR	90.0	DL, GL
		Justy 4WD	2 DR	90.0	GL/RS
		XT Coupe	2 DR	97.0	GL, XT-6
		XT Coupe DL	SP	97.0	DL
		XT Coupe 4WD	2 DR	97.0	GL, XT-6
Toyota	Small	Celica	2 DR	99.4	ST, GT, GT-S
		Celica 4WD	2 DR	99.4	
		Celica Conv.	SP	99.4	GT
		Corolla	2 DR	95.7	SR5, GT-S
		Corolla	4 DR	95.7	Deluxe, Luxury Edition
		Corolla	SW	95.7	Deluxe
		Corolla 4WD	SW	95.7	Deluxe, SR5
		Corolla FX	2 DR	95.7	FX-16, FX-16 GT-S
		MR2	SP	91.3	T-Bar, Supercharged
		Tercel	2 DR	93.7	Deluxe, EZ
		Tercel	4 DR	93.7	Deluxe
		Tercel 4WD	SW	95.7	Deluxe, SR5
		Van	PV	88.0	Deluxe, Luxury Edition
		Van 4WD	PV	88.0	Luxury Edition
	Midsize	Camry	4 DR	102.4	Deluxe, Luxury Edition
		Camry 4WD	4 DR	102.4	Deluxe, Luxury Edition
		Camry	SW	102.4	Deluxe, Luxury Edition
		Cressida	4 DR	104.5	Luxury Edition
		Supra	SP	102.2	Sport Roof, Turbo
TVR	Small	280i 2 DR	SP	94.0	
		280i Conv.	SP	94.0	
Volkswagen	Small	Cabriolet Conv.	SP	94.5	
		Fox	2 DR	92.8	
		Fox	4 DR	92.8	GL
		Fox	SW	92.8	GL
		Golf	2 DR	97.3	GL, GT
		Golf	4 DR	97.3	GL, GT

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Volkswagen (cont'd)		GTI	2 DR	97.3	16V
		Jetta	2 DR	97.3	
		Jetta	4 DR	97.3	GL, GTI, GL/Carat
		Scirocco	2 DR	94.5	16V
		Vanagon	PV	96.9	GL
	Midsize	Quantum	4 DR	100.4	GL
		Quantum	SW	100.4	GL
		Quantum 4WD	SW	100.4	GL
Volvo	Midsize	240	4 DR	104.3	DL/GL
		240	SW	104.3	DL/GL
		780	SP	109.1	GLE
		740 4 DR	SP	109.1	GLE
		740 SW	SP	109.1	GLE
		760 4 DR	SP	109.1	GLE
		760 SW	SP	109.1	GLE
Yugo	Small	Yugo	2 DR	84.7	GV, GVS, GVL, GVX

Size Class:

Small — wheelbase (after rounding to nearest inch) less than 100
Midsize — wheelbase (after rounding to nearest inch) in the range 100-109
Large — wheelbase (after rounding to nearest inch) greater than 109

Body Style Abbreviations:

2Dr — Two-door
4Dr — Four-door
Conv — Convertible
PV — Passenger Van
SW — Station Wagon

* Redesigned Midyear

HLDI Publications

Research reports published by the Highway Loss Data Institute are:

R72-1 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1972 Models,* June 1973.

R73-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1973 Models Compared with 1972 Models,* September 1973.

R73-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models,* March 1974.

R73-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Two Years,* December 1974.

R73-4 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Three Years,* December 1975.

R74-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1974 Models,* May 1974.

R74-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Year,* December 1974.

R74-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Two Years,* December 1975.

R75-1 *Automobile Insurance Losses, Collision Coverages, Initial Results for 1975 Models,* July 1975.

R75-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1975 Models During Their First Year,* December 1975.

R76-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1976 Models,* June 1976.

R76-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1976 Models During Their First Year, 1975 Models During Their First Two Years, 1974 Models During Their First Three Years,* December 1976.

R77-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1977 Models,* June 1977.

R77-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1977 Models During Their First Year, 1976 Models During Their First Two Years, 1975 Models During Their First Three Years,* December 1977.

R78-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1978 Models,* June 1978.

R78-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1978 Models During Their First Year, 1977 Models During Their First Two Years, 1976 Models During Their First Three Years,* January 1979.

R79-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1979 Models,* June 1979.

R79-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1979 Models During Their First Year, 1978 Models During Their First Two Years, 1977 Models During Their First Three Years,* December 1979.

R80-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1980 Models,* June 1980.

R80-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years,* December 1980.

R81-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1981 Models,* July 1981.

R81-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1981 Models During Their First Year, 1980 Models During Their First Two Years, 1979 Models During Their First Three Years,* December 1981.

R82-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1982 Models,* July 1982.

R82-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1982 Models During Their First Year, 1981 Models During Their First Two Years; 1980 Models During Their First Three Years,* December 1982.

R83-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1983 Models,* June 1983.

R83-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1983 Models During Their First Year, 1982 Models During Their First Two Years, 1981 Models During Their First Three Years,* January 1984.

R84-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1984 Models,* June 1984.

R84-2 *Insurance Losses, Collision Coverages; Passenger Vehicles, Vans, Pickups, and Utility Vehicles; 1984 Models During Their First Year, 1983 Models During Their First Two Years, 1982 Models During Their First Three Years,* January 1985.

R85-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1985 Models,* July 1985.

R85-2 *Insurance Collision Report, Passenger Vehicles, Vans, Pickups, and Utility Vehicles, 1985 Models During Their First Year, 1984 Models During Their First Two Years, 1983 Models During their First Three Years,* January 1986.

R86-1 *Insurance Collision Report, Initial Results for 1986 Automobiles,* August 1986.

R86-2 *Insurance Collision Report, Passenger Cars, Vans, Pickups, and Utility Vehicles, 1986 Models During Their First Year, 1985 Models During Their First Two Years, 1984 Models During Their First Three Years* December 1986.

R87-1 *Insurance Collision Report, Initial Results for 1987 Automobiles,* July 1987.

R87-2 *Insurance Collision Report, Passenger Cars, Vans, Pickups, and Utility Vehicles, 1987 Models During Their First Year, 1986 Models During Their First Two Years, 1985 Models During Their First Three Years,* December 1987.

R88-1 *Insurance Collision Report, Initial Results for 1988 Automobiles,* July 1988

V78-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1978 Models During Their First Year, 1977 Models During Their First Two Years,* February 1979.

V79-1 *Automobile Insurance Losses, Non-Commercial Collisions Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1979 Models During Their First Year, 1978 Models During Their First Two Years,* April 1980.

V79-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim for 1977, 1978, and 1979 Vans, Pickup Trucks, and Utility Vehicles,* October 1980.

V79-3 *Insurance Theft Losses; Vans, Pickups, and Utility Vehicles, 1979 Models,* May 1981.

V80-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups, and Utility Vehicles; 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years,* December 1980.

V80-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Injury Claim Frequency Results by Size of Claim; Vans, Pickup Trucks, and Utility Vehicles, 1977-1980 Models,* September 1981.

I75-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974 and 1975 Models,* June 1976.

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